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CONTENTS.

Agricultural.

For the Michigan Farmer.

THE HESSIAN FLY.

BY HOWARD EVARTS WEED.

This insect is just now attracting much attention in the daily press throughout the country, owing to the great damage caused by it. The crop reports of late show that it is doing much damage in several States, especially in Southern Illinois. Michigan has suffered a great deal from this pest, but not so much during the last few years as formerly.

The Hessian fly is one of those insects which appear at times and then seem to die out. Thus it is that it was so common a few years ago but has not been noticed within a year or so. This condition of affairs is caused by the parasites of the insect. There are several hymenopterous insects which prey upon this pest and thus serve to hold it in check. Thus when the Hessian fly is numerous the parasites at first are but few in number, but being furnished with an abundant food supply the parasites soon increase to such an extent as to nearly kill off the flies. Now again as the flies become few in number the parasites, having but a limited supply of food, soon become less in number and the Hessians again become numerous. Thus the war in nature is constantly being carried on and the periodical appearance of the fly is explained.

This insect has derived its name, Hessian fly, from the fact that it is supposed to have been first brought to this country at the time of the landing of some Hessian troops on Staten Island in 1776. Owing to the fact that they were first noticed on the island at that time it is supposed they were within the wheat used by them. But it did not cause marked damage until many years after. This insect was first described by Mr. Thos Say, a pioneer etomologist of this country, in 1814, under the name *Cecidomyia destructor*. It has now become quite generally distributed throughout the world, having reached England and New Zealand within the past two years.

The Hessian fly belongs to the order of Diptera or two winged insects, of which the common house fly and the mosquito are examples. It resembles the mosquito very much. The family to which this insect belongs is the *Ceridomyida* or gall family. The members of this family are all quite small and most of the immature insects live in abnormal growths of plants, caused by the irritation produced when the egg is laid.

A brief description of the Hessian fly in its various stages is as follows: The imago or mature insect is shown at Figure 1.

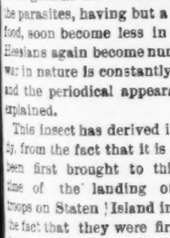


Figure 1.

This is black in color except through the base of the wings and at the joints of the body, which are more or less yellow in color. The abdomen of the female will often be found to be of a bright red color owing to a full store of eggs, but this coloring disappears when the eggs are laid. The insect measures a little over one-tenth of an inch in length and the wings expand about one-fourth of an inch. At the terminal joint of the female is the ovipositer, which can be retracted or expanded at will. Both sexes have the body covered with short black hairs. The wings are somewhat longer than the abdomen, and have but three veins. The two anterior veins are simple but the posterior is furcate or branched. The hind pair of wings which are found in most insects are here undeveloped, simply consisting of a knoblike appendage which is known as the poisers. The legs are long and covered with hairs but not with spines.

The eggs of the Hessian fly are small, reddish in color and of an oblong form. The larva is shown at Figure 2 as magnified and also natural size. This is reddish when young, becoming brown as it becomes larger.

Figure 2.

After a short time the larva assumes what is known as the "flax seed state," as shown in Figure 3. This is a semi-pupa state and lasts but a short time when it becomes a full pupa as is shown in Figure 4.

Figure 3.

Figure 4.

It is now known that there are three broods of this insect during the year. The flies appear in April, July, and September, but the time of their appearance will vary as the weather. The eggs are laid upon the stalk of the wheat, and the young larvæ crawl down within the sheath to the base, where they absorb the juice of the plant. This causes the plant to wither, and if there is more than one larvæ attacking the same stalk, as is apt to be the case, the plant will soon droop to the ground. It is now that the attack of the fly will be first noted, as the dried up appearance of the stalks will reveal the mischief being done. The maggots or larva do not eat the plant but simply absorb its juices.

In a few weeks after the larvæ have assumed the flax seed state they go into the ground for pupation and soon emerge again as mature flies similar to those by which the eggs were laid.

The transformations of the three broods are nearly the same. The eggs of the second or summer brood however are laid in volunteer wheat in which the fly passes through its development. They may also be found in timothy or other grass as its food plant is wanting at this season of the year.

This insect has not been reported as doing much damage in this State so far this year, but it is fair to predict that it will become quite numerous the coming fall and the following spring. Thus we should be ever on the lookout for it and adapt such remedies as may seem best fitted for the occasion. There is no remedy by which we may exterminate this pest, but there are some preventive measures which may be taken which will greatly lessen the damage done by it. Perhaps the best remedy under all conditions for this insect lies in good culture. This implies good preparation of the soil, manure, and the sowing of the most thrifty varieties. By so doing the wheat crop will be in a condition to withstand attack and a fair crop will be harvested.

The eggs of the fall brood are laid as a rule from the first to the twentieth of September. If, then, wheat is not sown until after the latter date the eggs will not be deposited upon it. By carefully looking through volunteer wheat about the middle of August one is enabled to estimate the damage which will be done later in the fall. If the flies are found to be numerous (at this season of the year in the flax seed state as shown at Figure 3) the wheat in the fall should not be sown until after September 20th. If but few are found the wheat should be sown early and as vigorous a crop raised as possible. Another good plan is to sow a narrow strip along the border of the fields about the last of August and then plow this under about the middle or last of September. Thus the eggs will be laid in this strip and destroyed. Again, only those varieties which are least affected should be sown. There seems to be a great difference in this, as some varieties are much less affected than others. The Clawson, Lancaster and the red varieties have a greater tendency to sprout, and for this reason will stand the attack much better. By some it is thought to be a good plan to cut the wheat rather high and then burn the stubble, but by this method many of the parasites are destroyed as well as the flies, and thus we kill our friends as well as foes.

AGRICULTURAL COLLEGE, MICH.

OATS AND PEAS.

Oats and peas sowed together is coming into use in this State as a fodder crop, and those who have been trying it for some years express themselves as well pleased with it. It is a crop which the Canadian farmers have grown with advantage for forty years, and to a great extent supplied the want of our corn crop in the feeding of live stock. The Minnesota Experiment Station has been testing the proper proportions of seed per acre, and for that purpose three plots were sown to White Canadian field peas and Probstier oats, in various proportions. Sowing seventy pounds of peas with sixty pounds of oats per acre, resulted in the oats smothering the peas on this rich land. One hundred and five pounds of peas with forty-five pounds of oats likewise proved to be too small a proportion of peas. Even on the third plot, on which one hundred and forty pounds of these white field peas were sown with only a bushel of oats, there were too many oats. The conditions were favorable to the stooling of oats, and they smothered many of the plants of peas. Similar plots, in which Blue Canadian field peas were mixed with Probstier oats in the same proportions as the three before named plots, did nearly the same, in that the oats crowded the peas too much, even in the plot on which two and one-third bushels of peas per acre were sown with one bushel of oats.

The party in charge of this experiment thus summarises his conclusions:

"Though further experiments are necessary, I think that either the Blue or White Canada field peas are the best sorts to sow with oats. I would advise sowing in the proportion of three bushels of peas with a bushel of oats, or, where the oats will stool a great deal, two-thirds of a bushel of oats. Theodore Louis, of Wisconsin, on his manured land sows only one-half bushel of oats and two bushels of peas per acre, but on drouthy and poor land, in a former trial, I did not find two bushels of peas enough. How this crop will compare with peas alone, as a fodder and hay crop, our experiments do not as yet indicate. The thinly seeded oats are in many cases useful in preventing the peas lying very flat. Certainly this annual crop would leave the land in our wheat growing sections in nice shape for that cereal the next year. So much seed per acre would seem rather expensive, since peas usually sell for rather more per bushel than does wheat."

Referring to experiments with peas alone, and their value as food as well as their valuable qualities as renovators of the soil, the same party says:

"In these field peas we certainly have a most promising crop for producing muscle forming foods or grains, to go with our great quantities of very cheap rough fodders, as hay, straw, corn fodder, etc., and to balance them up so as to furnish animals more nearly standard rations. Whether we can afford to grow them on our cheap lands, with high priced labor, better than to purchase bran, shorts, or even oil cake, is not certain.

"Our machine inventors should originate machinery for harvesting and threshing large crops of these. If we had pea machinery as well perfected as machinery for wheat, crops of peas would pay well. They are excellent in rotation with wheat, as they, like clover, put the land in good condition for that cereal."

THE E. W. ROSS CO., SPRINGFIELD, OHIO.

We desire to call attention to the Illustration) of the new Ross Ensilage and Fodder Cutters, and line of Carriers.

This Company has, with its usual enterprise, made another valuable move in the direction of improved machinery, and now presents for the first time, a line of six knife Cutters, with simple and reliable Carriers capable of being used at a 70 degree angle of elevation. Among the many advantages claimed we mention some of the most prominent as follows:

The machine has six knives, with 50 per cent increased capacity over the four knife machines.

A combination of a fluted rocking feed roller with a fixed toothed roller, insuring a positive force feed with every kind of material; green ensilage corn with the largest ears, icy and frozen corn stalks with ears, &c.

A cleaning comb inserted between the teeth of the fixed roller for the purpose of keeping the teeth of same free from all accumulation.

A ledger or cutting bar in two parts, one part stationary and free from wear, carrying the cleaning comb. The other part, a cutting plate, rectangular in shape, having four cutting edges which can be quickly reversed when necessary to present a new cutting edge to the revolving knives. This plate is made from special material, and thoroughly hardened, giving increased wear over the ordinary cutting plates in use.

A combination of expansion gears allowing the rocking feed roller to automatically adjust itself to different thicknesses of material.

Main knife shafts of crucible steel, with short overhang, thereby causing the machine to run very steady, provided with long self oiling journal boxes, obviating outside bearings.

A simple elastic chain mechanism, provided with a stop and reversing motion by which the operator of the machine can from either side of the cutter, instantaneously stop or reverse the motion of the feed rollers. The Manufacturers claim that it is the only cylinder Cutter built capable of this action.

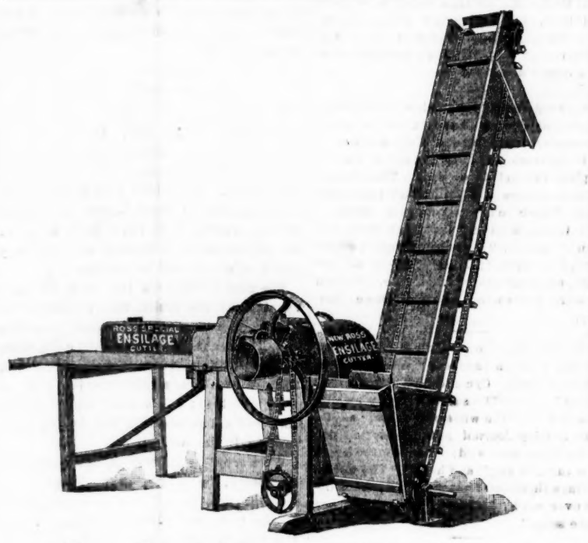
The five new styles of Carriers possess new patented features of improvement. Among these features, some of the new Carriers are provided with a patented pocket and adjustible hopper adapting their use to any angle of elevation up to 70 to 80 degrees, thereby avoiding the use of the extra supplemental Carrier heretofore necessary to obtain sharp elevation.

New patterns of patented double riveted buckets, either with or without metal top plates.

Provision for a simultaneous and equal adjustment of both sides of the Carrier chain, both sides being adjusted by a single movement from either side of the Carrier at will. The provisions for an angle Carrier delivering at a 70 degree elevation greatly economizes in floor space necessary for Cutter and Carriers, an important point where the silo is built in the barn, and space is limited.

The general favorable reputation of the Ross goods should be sufficient guarantee that the new manufactures of this Company will be reliably and honestly made, and worthy of confidence.

FROM Byron, Shiawassee Co., Mr. L. W. Barnes, of Byron, sends the following notes on the growing crops: "We are now having fine growing weather. All crops have made very great improvement since June 1. Wheat very uneven, although there is some very poor wheat, and much that is below an average crop, there is some very good wheat. Grass, barley and oats are looking fine. Corn planting was late, but the stand is good, and it is growing very fast now and being well worked. A greater area has been planted to beans than usual about here. The outlook for an apple crop is not so good as one month ago. On many trees the leaves are turning brown and yellow, and dropping, and although they blossomed full will mature no fruit."



New Ross Ensilage and Fodder Cutter.

THE MERIDIAN FARMERS' CLUB.

The Farmers' Picnic held at R. M. Cross' June 13 under the auspices of the Meridian Farmers' Club, was a very pleasant and interesting affair. The weather was favorable; the speakers were all present, and a nice respectable crowd assembled to hear them. President J. B. Morrison made a short address of welcome, and presented Prof. A. J. Cook, who addressed the farmers on the subject of Insects. At the beginning of Mr. Cook's remarks he gave a complete history of what is at the present time damaging so many corn fields—the cut worm. He explained how the cut worm moths lay their eggs in the fall in the meadows; as these eggs hatch in the fall the larva is a great hungry thing an inch and a half long in spring when these meadows are plowed for corn. He said these larva would also eat cabbage and tomatoes, and that they grow beans too. Mr. Cook told of a number of ways of getting rid of them. One way which would do in the garden was to scatter bunches of grass around at night and on lifting these bunches in the morning you would find a quantity of worms which you could kill, or if this grass was sprinkled with a solution of London purple or Paris green, it would kill them. After using the poison you will usually find them one or two inches under ground as they seem to bury themselves. He also said it would pay to dig them out but it was tedious business. The reason they do not destroy late planted corn, is they are all gone; they leave in two or three weeks, or in other words, turn to moths again. The only object in early plowing is, the birds will eat a great many of the worms. They will not freeze out. The professor next explained the work of the codling moth, and as a means of getting rid of them and their progeny he recommended spraying the trees with London purple in the following proportion: One pound to 200 gallons of water, mix in a little water and then stir thoroughly into the whole. London purple is cheaper than Paris green and does the work just as well, a very little of the poison is all that is necessary. The spraying must be done after the blossoms fall, as this is about the time the insect hatches, and if spraying is done before the blossoms fall, it will kill the adult bees and the brood also, as it is fed to the young in the cells. It is not too late to spray trees now, but, would have been better done earlier. To drive the curculio from plum trees, spread a sheet under the tree and with a padded mallet jar them off; this must be done a number of times, early morning or late at night being the best time to do it. Mr. Cook preferred late at night as there was not so much dew. In regard to plant lice Mr. Cook said: "You cannot poison them," but gave the following kerosene mixture as being effective in its results: Mix one quart of soft soap or one-fourth of a pound of hard soap with one or two quarts of boiling water; as soon as the soap is all dissolved stir in while all is yet hot, one pint of kerosene oil; stir violently till it is permanently mixed; the stirring is best done by use of a force pump; when ready to use stir in enough water to make 15 pints in all. It will not injure the foliage if used as directed. To destroy the cabbage worm use pyrethrum or buhach. It may be used as a powder, sifting it onto the plants, or mixed with water, a heaping tablespoonful to two gallons of the liquid. The liquid proves more effective than the powder. This insecticide is also excellent to kill house flies; tempt the flies to the kitchen, close the room tightly and throw a little of the dust about.

An essay, "Does it Pay?" by Mrs. Byron Balcom, followed; a very thoughtful paper, full of good advice. The meeting then adjourned for dinner, after which Judge S. B. Daboll addressed the meeting on "Education and its Influence." Mr. Daboll was not so much in love with bugs and insects as Mr. Cook was. He thought they were not so nice when we see our crops destroyed by them, but the professor's knowledge of exterminating the destructive things was all right. In the course of his remarks he said: All other classes band together, so why not the farmers? It is the farmer's duty to look after these things, get every cent on the pound or bushel he can get. He spoke of the grand institutions of Michigan, the University at Ann Arbor, the Agricultural College at Lansing and others in the State, all for the purpose of educating the boys, and he thought it was what all needed. But before starting let the boy have a purpose in life, know just what he is going to do. Do not pay out $2,000 to educate the boy to do a $500 business. Education is the great force that moves us today. That farmer is the best farmer who is the best educated. Mr. Daboll explained to the farmers a good many things about the buying and selling of wool, how it was handled and sorted, what was the work of the middleman, etc. Advised all to be cautious when starting in a new thing.

Hon. Wm. Ball handled the subject of "Stock Raising and General Farming." In the course of his remarks he said; "I, like the most of you, am a farmer. I see no reason why farmers should not associate with people of culture. Education is necessary to all classes, no matter what their business is." Mr. Ball said stock raising is as essential to grain raising as any one thing is to another. He gave a good deal of his own practical experience. Advised all farmers to be economical; if they could not afford things, wait until they could afford them, then they had just as good a right to them as anyone; said times were not as hard as we imagined; a farmer must not neglect his business if he wished to prosper. He spoke highly in favor of farmers' organizations; thought they were necessary to them to exchange ideas and educate themselves, and when they know what they want they can get it.

Mr. A. H. Warren followed with a paper on the "Value of Pedigree," which we give below:

Mr. Chairman, Ladies and Gentlemen: The subject assigned me for this occasion is one that en bodies an implication that pure breeds possess some other than a meat value. The true value of a pedigreed animal depends upon points of historical record, combined with individual merit; while in the grade or scrub the animal has nothing but its merit to recommend it. I am a strong believer in animals of superior merit, combined with the test of pedigree.

A good grade steer weighing 1,000 pounds, squarely built and well fattened, has a certain market value. A pure bred equally as good as the grade, has the same market value for beef then. If the pure bred is but of the same type as the grade, why would he as a sire be more valuable than the grade? He is the same build, is broad and deep, fine boned and is pleasing to the touch. For a certain amount of certain kinds of food, he gives a given gain per day; just the equal of the grade in every apparent fact and figure. But to illustrate more fully I will give you an example of these pedigrees, as they may appear. The pure bred is as follows: Barrington Duke 7th, bred by George Hamilton, Lexington, Ky.; sired by 2d Duke of Kent 51119; dam Barrington Lally 37622; grand dam imp. Barrington Lally, by 2d Duke of Rosedale (33722) and so on through a long line of ancestors of superior breeding. So has our grade a historical record, it runs thus: Deceiver; color, white; bred by Tom Careless, of Nowhere. Sire, Half Blood; dam, Long Legs; grand dam, Humpback, by Scalawag. You will observe at a glance that the names in the first list indicate animals of high rank; in the second list, all of low rank. Now it is the experience of men who have most improved our stock, that animals bred in a line with reference to some particular feature possess the power of transmitting these features to their progeny with great certainty. It is also their experience that after years of careful breeding in a line, so that their character of breeding has become fixed, and the force of hereditary transmission is strong, a single outcross will break up all their certainty for a time indefinite. As good authority as Joseph Harris, in his book entitled "The Pig," page 78, says: "The improved Berkshire sires were used many years ago, to give size and constitution to the Essex. And one of the most prominent breeders of Essex swine says that on one occasion in a litter of Essex pigs, two little pictures of the Berkshire sire, their remotest ancestor by at least 28 years, appeared." This naturally draws out an illustration of the value of an animal, certified to by pedigree.

Although many times we see very good grades, I would not recommend these grades as sires. They may possess all the fine practical points of merit, but their alien blood might cause a fearful breeding back to the old type—the scrub. The English have allowed the fourth cross pedigree to be entered in their herd books, and they have been bred from, but such are not eligible to record in this country. The one-sixteenth of alien blood may be too potent a factor in the production of the offspring. I wish to be understood that no pedigree can atone for want of merit, as both should be found in all classes of stock.

But the final proof of the true value of the pure bred animal is in the stock which follows him (his descendants), and when a community of farmers have in their midst a male animal which thus proves himself of superior value, no inducement should be allowed to take that animal from them. While the pure breeds, under proper management, yield bountiful returns, with poor feed and care they will speedily degenerate and give unsatisfactory returns.

I believe that the grand principle in stock-raising is to produce an animal that meets our demands at the earliest age possible. I have no idea of a breed that can give a profitable return under a system of starvation economy. We must learn that it is more profitable to feed 20 bushels of corn in eight months and receive 200 lbs. of pork than it is to feed the same amount in 18 months and get 200 lbs. of lean meat; and no one who has ever bred and fed natives and then one of the improved breeds will doubt that this illustrates the true relations of these breeds.

And right here I will give you an example of what pedigree and inbreeding is doing for the trotting bred horse: Rysdyk's Hambletonian has no less than four crosses running back through sire and dam to imp. Messenger. Goldsmith's Maid is inbred to Old Abdallah, having three crosses of the Abdallah family in her veins. Maud S., the greatest mare that was ever on the turf, has two crosses to Abdallah. Mambrino Gift, the first stallion to trot a mile in 2:20, was inbred on both dam and sire's side to Pilot Jr. Pocahontas is twice inbred to Mambrino Chief. Clingstone has two crosses of Hambletonian blood. Jerome Eddy, King Phillip and Day Dream have each two crosses of Rysdyk Hambletonian blood, hence you will see at a glance that some of our most noted flyers have been inbred a number of times, as well as having the best of pedigree.

The value of any pedigree depends upon its genuineness and completeness, not so much on its length as upon how long the top crosses have been in line without the infusion of inferior blood. It is the pedigree that makes the animal worth more than he would be for other purposes, and by understanding their breeding we may know how to couple together so as to get the best results.

In 1850 Mr. S. E. Bolden bought at the Bates estate sale the cow Duchess 51st, and after arriving home and comparing her with other Shorthorns on his farm, became so convinced of the superiority of the Bates blood that he determined to make it the foundation of his herd. He then purchased Grand Duke (10284) and from this pair he laid the foundation for the Grand Dukes and Duchesses, becoming one of the most noted breeders of sires, and selling for the highest price of any in his day in England. Why is a well bred Duchess, young and all right, worth more than any other family in the Shorthorn race? It is because they have been bred so long and strong in a line, with judgment, that they improve other Shorthorns, and the demand for strong bred sires is greater than the supply. The male practically represents one half of the herd, hence the necessity of looking upon an animal on paper as well as individually. I have heard many say: Select the animal and afterward the pedigree. I would say: Select the pedigree first, for it is the most important point in individual merit, and then see that the animal in all his points is worthy of his pedigree. A plain animal, or one with no striking points, but with all the characteristic qualities of the breed to which he belongs, with a choice pedigree, will generally breed well, while a fine looking animal with exceptional points and a poor pedigree will often fail. And now, brother farmers, let us look well to line breeding and the value of pedigree in our flocks, and see if we can not add value to our live stock, and thus in one way confer a blessing on our fellow men.

Prof. Cook spoke of the value of silos to farmers, recommending them as efficient aids to the stock and dairy business.

The next meeting of the Club will be held July 11th at the residence of Mrs. Ann Smith, southeast of Ovid.

MRS. J. B. MORRISON,
Cor. Sec.

MONEY IN POLITICS AND LEGISLATION. AND ITS EFFECT UPON TAXATION.

[A Paper read before Saline Farmers' Club June 13, 1890.]

Trees that bear the fruit of reform must be grown in public sentiment, and many of us must be content if we shall but stir the soil about them or add slight nourishment to the fibrous roots through which social and national life is absorbed.

During the last few years we have been passing many centennial holidays, and the glories of the republic have been painted in such glowing colors on so many occasions, that in this paper I shall spare you even an attempt at repetition, though I trust that I may not be considered void of patriotic pride amid all the enjoyments and privileges surrounding us.

Though I bring you nothing new, I shall be rewarded with satisfaction if within your minds is awakened a slumbering thought.

The subject chosen is one of fast growing importance and one which must sooner or later be settled by the people.

I am not an alarmist, and do not believe that it will require a revolution, nor even an evolution to the doctrines of Henry George, or but few of those of Edward Bellamy, to correct the evils.

Wealth is something that few of us possess. And while it is something that fewer of us would reject, we have no indictment to bring against riches themselves; nor would we prohibit any who may be so favored from the enjoyment of any luxury or privilege they may rightfully and legally obtain.

There are many contracts which our courts hold void on the ground of public policy. There are purchases and sales held for naught or void because contrary to law.

What first we desire here to urge is that contracts, purchases and sales, in which gold and greenbacks are made legal tender for public offices, shall and ought to be declared both by law and public sentiment null and void.

I am not unmindful of present statutes upon the subject, though would be if their enforcement were the only means of knowing them.

In an interesting discourse before this club a few weeks since, we were told of the rapid increase of wealth in this country, and how during the last twenty-five years it was fast centralizing into few hands.

In 1847 there was but one person in the United States who was supposed to be worth more than five millions of dollars. Today his lineal descendants are believed to be owners of not less than $250,000,000. We have now several persons whose wealth passes one hundred millions each, twenty living persons in the oil business alone averaging more than twenty millions each and more than one half of all the combined wealth of the nation is owned by less than 25,000 persons. Or for the whole people one man averaging as much in ownership of property as 2,500 of his neighbors.

No nation or country on the face of the globe presents such a picture of centralized aggregate capital as does this.

I shall not discuss the danger, if any, which this may bode, except in so far as it pertains to public office and the exercise of legislative functions in office.

Our election days in cities and in a few of the rural districts have become great auctions, where sovereignty and honor are bought and sold as base commodities, and where votes are struck off to the highest bidders.

The men who can spend their thousands for some petty office, as "distinguished citizens' purchase those whom they call "cattle" and tomorrow the one who has been dubbed an Hon. fails to recognize his property when met upon the street.

In many of our cities there is no such thing as an election contemplated by the founders of our government or within our own conception. Fraud, corruption and overt bribery are common and notorious. It is beyond a possibility to punish offenders, for within the grasp of money is held every department of government, and the police and courts are as completely under its control as are the offenders sought to be punished.

Stand about the polls on an election day, and see those who are clothed with the rights of citizenship waiting from morning till noon, and often from noon till toward the closing of polls, waiting, not for an opportunity to vote, but for a higher bid. Not because of ignorance do they wait; for that makes men conceited; but rather because of poverty upon the one hand and money on the other. It is poverty that makes men humble and submissive when they vote, as at other times. And let it here be said, that education of the voter will not in itself remove this curse from our land.

These bribes, to escape the law, most generally take the form of payment for services on election day, and these employments are ways of one in the opposite party. The services are usually ended when he walks up to the polls and votes the ballot placed in his hands in such a manner as not to escape the observation of his purchaser.

From our city elections, where, in many of them, money is absolutely king, we pass to our more general elections where the candidate must cover a wider territory and resort to other methods.

In times past great political ideas seemed to converge from without until they found some eminent or distinguished exponent and by voluntary sentiment he was chosen as standard bearer for his party.

Now the rule and not the exception, has changed. An ambitious millionaire, a member of some party, is attracted by the glitter of office. Not that there are evils which he feels that he might help to rectify, not that he has conceived the solution of some great economic problem, but hungry for the honor, he sets out to attain it. Raising over himself the star of his ambition, without the idea of his fitness ever having entered any other mortal head, he pushes on to glory and paves his way with dollars. He needs assistance and is willing to pay for it. But he has not long to wait, for we have come to a time in every community, when we have professional politicians whose only business is to serve wealthy individuals aspiring to some office. Men who like plumbers are ready to lay pipes for anybody who will pay well for their services. Some of them insist that their services shall be rendered within their party, while to others it is a matter of little consequence and they can easily swear fealty to the man of dollars, and have little care about his political faith.

When these agents have been secured then must begin the work of evangelization or contamination, as you may choose to call it.

Sometimes the greater work required is in securing the party nomination, depending upon the party majority for an election afterwards, though using money wherever it will be of avail and especially if the party majority is not large. In securing these nominations agents are sent into the various counties or districts sending delegates, and there secretly and effectively they pack the delegations for their candidates, invariably defeating the will of the people whom the delegates are supposed to represent.

Time will not permit a rehearsal of the various modern methods used by millionaires in securing their political preferment, a brief review of the usual and patent means now employed by them, in some of the States, in obtaining seats in the U. S. Senate will serve well as an illustration.

Having secured his dispensing and contracting agent he first subsidizes some metropolitan journal, even though he may have to buy a controlling share of the stock. His campaign without any newspaper backing will hardly be defensible. When newspapers sufficient have been converted, the next step, and important one, is the nomination of men favorable to his candidacy. To this end these nominations in various legislative districts are planned and dictated as far as possible by the aspirant for senatorial honors. When this power has been exhausted, then more direct means are used. Through this authorized agent is sent to each and every legislative nominee of the aspirant's political faith, who will accept it, from one hundred to several hundred dollars to aid him in making sure his election. This money goes directly from the candidate, with his compliments, to the legislative nominee, not as a bribe of course, but from an unselfish liberality and partisan pride.

If these States have a legislature the size of ours, there are 132 members, if 70 of them be of one political faith and 62 of another, the 70 will choose the senator. To do this that 70 will go into a party caucus and in that caucus 36 men of one mind will nominate the senator who will be elected. So it will be seen that our rich man has not such an interminable road to travel after all.

Since comparisons are sometimes odious, let us venture, without that purpose, to go back forty years to the Senate of 1850, to a time when men were elected because they were the choice of the people. In that body sat Daniel Webster, Henry Clay, William H. Seward, Thomas Corwin, Stephen A. Douglas, Thomas Benton, Salmon P. Chase, John P. Hale, John Davis, Lewis Cass, Hannibal Hamlin and many others whose light and statesmanship have shone out upon the century with a brilliancy that will not dim with years.

To-day (not as drawing a comparison, that would be unpatriotic), we have in that distinguished body eighty-four men worth more than $500,000,000, and estimated at $350,000,000.

That the effect of such unholy and semi-criminal practices as are resorted to in the election of such men, is to deprive better men, if there be any, from the places they fill, need not cause our greater alarm, though the effect of such course may be to turn our republic into a moneyed aristocracy.

Men whose offices have been thus corruptly secured, do not become immaculate upon taking their seats. I think it causes no strain to accept the proposition "that he who gives a bribe will take one:" But whether this be true or not, these men go into the highest legislative body of this nation, or of any other, bound up in stocks and ownership of railroads and telegraphs, of steamboat lines and harbors, canals and public lands, patents and government bonds, and are expected to legislate for the interests of the people upon all these great questions. Nor does this selfish interest apply only to their own conduct; but

(Continued on Eighth Page.)

The Horse.

RACE MEETINGS IN MICHIGAN

Jackson	July 1 to 4
Coopersville	July 3 to 5
Port Huron	July 3 to 5
Grand Rapids	July 8 to 11
Saginaw	July 15 to 18
Detroit	July 22 to 25
Plainwell	July 24 to 25
Coldwater	July 30 to Aug. 1
Stockbridge	July 30 to Aug. 1
Mason	Aug. 5 to 7
Saginaw	Aug 26 to 28
Port Huron	Sept. 2 to 5
Lansing	Sept. 9 to 12
Benton Harbor	Sept. 10 to 12
Port Huron	Sept. 15 to 19

THE AMERICAN DERBY.

On Saturday last, at Washington Park, Chicago, the American Derby stakes were run for, and the excitement over the race brought out about 40,000 people. More would have been there could the means of transportation been obtained. The Derby is a sweepstakes for three-year-olds, one and a half miles, each entry paying $250, to which the club adds $7,500, the second horse gets $1,000, and the third $500. The first horse this year got nearly $18,000. Seven horses started, and their names, with weights carried and jockeys were as follows:

Horses.	Weight lbs.	Jockeys.
Mt. Lebanon	115	Overton
Ben Kingsbury	108	Hazlett
Uncle Bob	115	Kiley
Santiago	115	Barnes
Goodbye	118	Hollis
Jed	118	Soden
Sunny Brook	118	Britton

Uncle Bob, by Luke Blackburn, was the favorite at three to five. The scene on the grounds just before the start was a wonderful one; notwithstanding the heavy rains of the night previous and the forbidding look of the morning's sky, grand stand and greensward seemed buried under the swarming people long before the hour set for the races. Gradually the crush increased, and when the opening contests began every aisle and stairway, to say nothing of seats, was jammed to suffocation. In the carriage ring matters were even worse. The lines of vehicles were packed in solid lines reaching so far away from the fence as to leave little chance for a view to the majority of occupants except the lucky ones in coaches or those who could be lifted on a comrade's shoulders. With all this, steam railroad and cable trains kept discharging other hundreds of people at the gorged gateways, one line even resorting to pressing in sleeping coaches and baggage cars to meet the demand for transportation.

When the bell rang for the Derby horses the seven starters were quickly got together, and in a very few minutes starter Sheridan sent them off with a splendid start, the horses aligned like a line of infantry. Then the shouting in the grand stand began, swelling into a mighty roar, as the exciting journey continued. Good-bye was first to forge a trifle ahead, but it was only a trifle, and the seven nervy beasts raced around neck and neck in a bunch. Passing the stand Jed was slightly in the lead, with Kingsbury close on him, while Uncle Bob and Santiago were toward the rear. Now Good-bye, who had been setting the pace, gave way to Sunny Brook, the latter pulling up with a sudden spurt from almost last, while Good-bye fell back to become tail-ender to the finish. Along the back stretch they came, still bunched closely. When rounding the turn Ben Kingsbury and Jed made a play for the leadership. Kingsbury got it for an instant, heading Jed cleverly, but as they entered the stretch the orange and black cap of Kiley on Uncle Bob was noticed emerging grandly from the cluster. Close at hand sprang out the red maltese cross, the colors of Lucky Baldwin, of the big boned California racer, Santiago. Barnes on Santiago was making a plucky effort, but it was no use. Do what he would mud seemed to cling desperately to Santiago's already tired heels. The long stride and the exhaustless wind of the son of Luke Blackburn were unconquerable, and amid the most uproarious howls of delight Uncle Bob darted past the wire two full lengths in the lead, while Santiago was second only three-quarters of a length ahead of Kingsbury. Jed was fourth, some distance off, while the others straggled in pulling up badly beaten. Time, 2:55¾.

Last season's Derby was won by Spokane, the great son of Hyder Ali, and the time was 2:41½. The track, however, was in fine condition, while this season it was very heavy.

The winner, Uncle Bob, was bred in Nashville, Tenn., sired by Luke Blackburn, and was named for the famous old darky hostler at Belle Meade, Uncle Bob. The colt was so poorly thought of at the Belle Meade sale in the spring of '88 that the venerable black hostler bought him for $25 rather than see him "go for nothing." A few days afterwards Uncle Bob sold his now celebrated colt to Sam Bryant, the owner of Proctor Knott, for $400. The next sale of the Derby winner was by Bryant to George Hankins, of Chicago, for $15,000, scarcely three days ago. The conditions were that should Uncle Bob land the Derby $2,000 additional should be paid by Hankins to Bryant. The result shows that Bryant, while making sure beforehand of the equivalent of the Derby stakes, has given away as a present his magnificent steed to Hankins.

A GREAT RACE.

The match race between Salvator, winner of the Suburban, and Tenny, one of his competitors, for $5,000 a side, and $5,000 added by the club, distance, a mile and a quarter, was decided on Wednesday last at Sheepshead Bay, N. Y. There was a big crowd of people, with a large sprinkling of ladies. These horses are four years old, and each carried 122 lbs. The two best jockeys on the turf had the mounts, Garrison on Tenny, and the colored boy Murphy on Salvator. The track was very dusty and the sun hot. Tenny was the favorite in the betting at six to five; Salvator stood at three to five. It was a hard race from start to finish. Garrison laid Tenny's head just at Salvator's girth, now and then letting the chestnut get a clear length in the lead, and again closing up to his old position. Murphy rode Salvator with a light rein, now and then giving him his head as if to test the powers of Tenny, and he invariably drew away from him. Towards the close Garrison used both whip and spur, gradually forcing his horse, inch by inch, so Salvator only had a neck to the good, and at the close it was at first thought the heat was a dead one. But Murphy had managed to get Salvator's head under the wire first, and landed him a winner of the purse and stakes. It was one of the hardest fought battles ever seen, and both horses were pushed for all that was in them. It was not one of Splan's "fixed events," but every nerve of horse and rider was strained to the uttermost to win. The best time for the distance, a mile and a quarter, heretofore, was 2:06¼, Salvator's time was 2:05, beating the record a second and a half. The mile was ran in 1:39¾, which nearly equals the best mile ever ran in this country. The winner of the race, Salvator, was sired by imported Prince Charlie, dam Salina by Lexington; g. dam Lightsome, by imp. Glencoe out of Levity, a daughter of imp. Trustee. Prince Charlie's sire was Blair Athol, son of the great Stockwell, and his dam Eastern Princess by Surprise, a son of Touchstone. It will be seen that Salvator is a great horse by right of inheritance. Tenny's sire was imp. Rayon D'Or, a French bred horse, and the best three-year old of his year. His dam was Belle of Maywood by Hunter's Lexington.

Handling Colts.

L. J. Rose, the noted California breeder, owner and breeder of Stamboul, 2:12½, gives the following as his method of handling colts:

"The first handling a foal receives is at weaning time, and they are weaned when about six or seven months old. We then teach them to lead, to be curried and brushed, to have their feet picked up and rasped to an even bearing; also to be bridled, to have harness on, and work double by the side of a gentle horse, say five or six times. During this time they are fed grain, barley and alfalfa hay. This takes about two months, when they are turned out on green alfalfa and left to run for one year, or to the first of January, and when two years old. While they run out on pasture neither the colts nor dams are fed any grain, both remaining sleek and fat on green pasture, generally alfalfa.

"When taken up in January, in their two-year-old form, they are broken to single harness, and given short but lively work, and we get as much trot into them as possible. This takes about four months, when they are ready for sale, if not sold, are again turned out to pasture. I do not, however, intend to keep over any colts, except for racing purposes, after they are two years old, and expect to have yearly auction sales, probably in New York city, and sell all the two-year-olds on hand, and will begin by having my first sale in the spring of 1889.

"This formula of raising and training I do not give as perhaps the best way, although it has my approval, and gives the best results with the minimum of expense and work.

"If this is done with judgment, not working the colts too long at a time, always stopping before they feel tired or dull, then it is a benefit to them, and gets them gentle and develops a desire to trot, which is never forgotten, and will be found each succeeding year with intensified desire and speed.

"Gentling the weanlings takes from October till the first of January, training two-year-olds until the first of May, and training the older horses and attending the fairs and race meetings until October."

Misuse of Horse Power.

Nearly twenty years ago two brothers purchased each a team of Canadian ponies for work upon their farms. They were as nearly alike as two teams could be, and, under the same management, would have lived and done service an equal length of time. One brother always drove rapidly, and would reach his home—four miles distant from the railroad—in fifteen or twenty minutes less than his brother, although he lived a quarter of a mile beyond his brother's house. The other brother never urged his horses off a walk if he had a load on. If the horses chose to trot down the lower slope of a hill he would allow them to do so. In guiding them he strove to avoid all stones, heavy ruts and bits of sand. It seemed to be his constant aim to husband the resources of his team. The result was that after twelve years of constant use the slow and careful driver still had the same team, and a good team too. Meanwhile the other brother had had eight different horses and spent over $900 in horse-flesh.

This same misuse of horse power we have noted recently in New York City.

Three years ago a farmer died and left to his two sons a profitable trucking business. The horses were good and were always in good condition. As soon as the too sons assumed the reins they changed the order of things. As it took full an hour to reach their business they endeavored to start fifteen minutes later and make up the time by trotting their horses. This was too great a strain, and the consequence was that they had to replace one of their horses within six months. Another gave out a year and a half later, and a few weeks ago they replaced the third. If these same young men had got up early in the morning and fed and groomed early, and then allowed ample time for their heavy horses to walk all the way to their work, the probabilities are that they would still have the old horses—old in years, but not old in spirit and activity.—*Mail and Express.*

Horse Gossip.

TOLEDO horsemen are making a good deal of noise over their fast studs this spring. They seem to have all been bred in Michigan, however.

SPOKANE, winner of the American Derby of 1889, was beaten last week by Wary, a son of Warwick and Mary Anderson, mile and an eighth, which was run in 2:02. Spokane was favorite in the betting.

AT the Lansing meeting on Wednesday last, the horse Rex, a chestnut gelding which won the 2:30 race at Pontiac, dropped dead immediately after the wire was passed in the third heat. The cause was undoubtedly the heat, as the thermometer was registering over 90 in the shade at the time.

MR. HENRY HAYDEN, of the Hayden Stock Farm, near Jackson, has purchased the imported French coach horse Gideon 259, and will keep him in the stud. Gideon was sired by the French government stallion Utrecht, dam, Mine D'Or. He was imported by M. W. Dunham, of Wayne, Ill., and represented to be a very fine animal.

LOUIS NAPOLEON 207, who has been making the spring season in Kentucky, will return to Michigan and make a season from July 8th to November 1st. As quite a number of horsemen have expressed a wish to use this horse this will give them an opportunity. His record as a sire keeps growing as his get develop. This season his blood is winning money.

SUREFOOT, who was the favorite for the English Derby, is believed now to have lost it from his ill-temper. His jockey had orders to start him slow, when he at once took to biting at his competitors, and worked himself up into such a temper that he could not run. The American horse Pilgrim lost a race this season in the same way, turning to bite his nearest competitor just before the wire was reached, and losing by a head.

IN the special four-year-old stake to be trotted at the next meeting of the Kentucky Trotting-Horse Breeders there are eighteen entries, among which are Queen Wilkes, 2:29½; Greenleaf, 2:28¾; Bonnie Wilmore, 2:27½; Mattie H., 2:24½, a sister to Geneva S.; Gillette, 2:25; Glenview Belle, 2:30½; Nancy Hanks, 2:24½; Margaret S., 2:19½, and Allerton, 2:18½. If these would all start what a race it would be!

THE management of the Shiawassee County Agricultural Society have issued a speed programme for their annual fair, which is to be held September 16 to 19, the speed trials to take place the last three days. The amount offered in purses is $720, divided into eight classes. These classes comprise farmers' double teams, stallions that have made the season of 1890, 2:40 class, gentlemen's single drivers, 3:00 class, 2:50 class, free-for-all trot or pace, and half-mile running race. Warren Woodward is President and E. O. Dewey Secretary.

AT Erie, Monroe County, on Wednesday of last week, a match race was trotted between the Toledo horse Cyclone and Sorrel Jim, owned at Monroe. The stakes were $100, which the horse from "the wilds of Monroe," as the Toledo *Sunday Journal* puts it, carried off. Jean La Frambreau said: "Dat Monroe horse he win sure, be gar," and he did. The musk-rat village therefore feels good if duck-shooting is over, while the Toledo "mud hens" are "in the soup."

MR. W. J. G. DEAN, of Hanover, Jackson County, the noted breeder of Jersey cattle, has lately been investing some money and spare time in trotting horses. He sends us a catalogue of his Oaklawn Stock Farm, in which we find a notice of the trotting stock owned by him. The stallion he has selected to head his breeding stable is Madrid King 10193, sired by Madrid 1835, a son of George Wilkes, and out of the mare Mercedes, by Belmont 64. The dam of Madrid King is Contour, by Onward 1411, one of George Wilkes' best sons; 2d dam, Cut, by Brignoli 77, dam Orop, by Pilot Jr. 12. Madrid King therefore unites the blood of Hambletonian 10, Mambrino Chief 11, and Pilot Jr. 12, and Henry Clay, a combination which has given us some of the fastest as well as the gamest performers on the turf. He has three direct crosses to George Wilkes, one on the side of his dam and three on that of his sire. The brood mares selected by Mr. Dean represent the blood of Louis Napoleon 207, Tremont 1565, Joe Gavin 584, Tennessee Wilkes 2735, Mambrino Patchen 58, Blue Bull 75, and the Tennessee pacing stallion, Tom Hal.

The Farm.

Mulching The Soil.

Nature abhors a nude earth-surface, and proceeds at once to mulch it with some kind of vegetable growth. This fact should teach us. Mulch admits air, warmth and moisture, but shuts out scorching sun and blighting wind, and prevents escape of fertilizing gases. A mulch of vegetable matter collects warmth from the sun, transmits it to the soil and retains more or less of it through the night, thus stimulating growing vegetation; but when not mulched, the cool night air, if it does not check growth, does not advance it. The soil beneath a mulch is several degrees warmer mornings than an exposed soil. A plot of potatoes was planted April 14 and a portion of it mulched four inches deep with refuse hay. May 5 the potato-stalks were breaking through the ground on the mulched portion, and none were visible on the other. Without doubt, the former will mature a week or ten days in advance of the latter. Nor is this all the advantage. The soil on the uncovered portion became compacted by heavy rains and had a stiff crust, while the soil under the mulch remained loose and friable. The potatoes were planted four inches deep, and those on the mulched portion will not (except to rid them of bugs) be touched again till harvest-time, when it is expected they will outyield the others (as has been the case before) notwithstanding the several cultivations the unmulched will get. Mulching nut-trees with earth largely increased their productiveness, and doubtless the same effect would prevail, in a measure at least, if applied to fruit-trees. Cover a spot of ground one season with a stack of hay, or boards, rails, flat stones, or in any other way, and its productive power will be increased. Boards or flat stones laid on the ground about tomato, cucumber or other plants, will hasten their maturity one or two weeks, and straw will do the same. Mulching with the latter material fulfills a double purpose—the first season its action is mechanical; the second, chemical, for when rotted it enters into the elements of plants. To permit refuse hay and straw to decompose before applying to the soil, is to lose near half its value—the mechanical.—*Galen Wilson, in N. Y. Tribune.*

Soil Tests of Fertilizers.

Bulletin No. 9 of the Massachusetts Hatch experiment station contains the result of soil tests with fertilizers by a number of farmers in different parts of Massachusetts during the past year.

Potash produced an average increase of crops varying from 1.9 bushels of hard corn per acre in Marblehead to 22.8 bushels in Amherst; and from 150 pounds of stover per acre in Worcester to 1,420 pounds in Amherst. It proved more useful in its average effect upon the production of hard corn than either nitrogen or phosphoric acid in four out of eight experiments; and proved most effective in the production of stover in four experiments.

The effect of the use of phosphoric acid varied from a decrease of 27 bushels per acre in Marblehead to an increase of 8.2 bushels in Freetown; and in the production of stover it varied from a decrease of 187 pounds per acre in Marblehead to an increase of 462 pounds in Shelburne. This ingredient proved most effective in the average production of hard corn in two experiments and in its influence on stover in only one.

The average effect of nitrogen varied from .2 to 6.2 bushels of corn increase; and from 165 to 682 pounds increase of stover.

Potash gave an average increase over nitrogen as follows: Hard corn, 1.73 times stover, 2.24 times. The average increase of potash over phosphoric acid was: Hard corn, 1.83 times; stover, 3.05 times. It thus becomes evident that potash produces relatively more effect upon the yield of stover than upon that of grain, and that it greatly exceeds either nitrogen or phosphoric acid.

The experiments, however, show that soils vary widely in their requirements and establish the wisdom of the policy of local soil tests. Only when the farmer knows what his soil requires can he produce the best economic results. It is folly to continue the indiscriminate and blind use of fertilizers. To ascertain what is needed in any given case for any particular crop put the question to the soil itself.

Potatoes under Straw.

There are two or three advantages in growing potatoes in this way. One is that no cultivation being necessary the hills can be planted closer together each way, giving a larger yield. The mulch aids materially to retain moisture in the soil, and this, in a dry season especially, is often quite an item. No cultivation is necessary, and in a busy season often this will be an item.

The plan is better for late than for early varieties, as the mulch rather retards the growth, at least at first. In many localities there is more or less of a drouth nearly every summer, during the latter part of July and August, usually at a time when late potatoes need moisture; and a good mulch at this time will aid in securing this by retaining moisture in the soil.

Were it not for interfering too much with other work, the best plan of applying a mulch is to prepare the soil in a good tilth, mark out the rows and plant the seed, covering with soil, but taking pains not to cover too deep. Then after the plants have started, just showing above ground, apply the straw. But care must be taken not to wait too long. The only objection to covering with straw as soon as planted, is that if the weather should be cold and wet there is considerable risk of the seeds rotting, and especially in low, wet land. On higher or well-drained land this danger is very much less.

The soil should be plowed deep and thorough, and prepared in a good tilth by harrowing. Mark out the rows shallow and not more than two feet apart; then drop the seed eighteen inches apart in the rows, covering with a little soil, and then haul out and apply the wheat-straw, spreading evenly over the surface. No other attention will be necessary. Occasionally a few of the stronger weeds, like jimson and ragweed, will force their way through the mulch, but the few that will succeed in doing this can be easily pulled up, and no cultivation is needed. Where wheat is made a leading crop, so that a good supply of straw can be readily secured, this plan can often be made profitable, as it saves labor at a time when usually work is very pressing; while in a dry season there is a much less risk of failure. Wheat or rye straw only should be used.—*Prairie Farmer.*

Strange Facts in Corn Cultivation.

The March number of the Bulletin of the Ohio Experiment Station treats of experiments with corn. One thing that will surprise many farmers is the fact that different methods of cultivation had but little effect on the yield. The average yield for surface cultivation was 93.5 bushels per acre, while that with deep cultivation was but two bushels per acre more. In two seasons, one an ordinary or average and the other moderately dry, the same general results were attained, deep cultivation giving a little the larger yield. Another surprise is in the fact, as demonstrated, that different amounts of cultivation made no great difference in the yield. It was found that three workings gave 64.8 bushels; four workings 72.4 bushels; five workings 63.9 bushels; six workings 66.7 bushels and seven workings 71.9 bushels. A plot cultivated but once with a harrow 54.5 bushels; another three times with a harrow gave 54.6 bushels; another three times with cultivator and double shovel 57.7 bushels; another with same ten times, 60 bushels; another with cultivation only five times, 64.7 bushels; another with double shovel only five times, 72 bushels; while two plots along side, one with cultivator, the other with double shovel each four times gave almost exactly the same yield, 69.2 and 69.3 bushels.

We believe in thorough tillage, and are almost afraid to publish these results lest the boys will say "What's the use, then, of giving the corn more than three or four plowings, and let's use the cultivator all the time, too, it's lighter for us and the team, and the yield is just the same. Those Ohio experimenters have proved it."

Unless some explanation can be given by our experimenters for such unexpected and unreasonable results it will not be strange if farmers begin to lose faith in this theoretic experimental business. We confess it is too difficult a problem for us to solve at present.

Applying Ashes.

Neither wood or coal ashes should be allowed to go to waste; both can be used with good results if proper care is taken. Unleached wood ashes are of course the more valuable; next comes leached wood ashes, and then coal. They are all, however, well worth the labor of saving and applying, and can be used for a variety of purposes. It is rather true, in the garden, the truck and small fruit patch, that they can be used to best advantage. If properly stored away so as to keep dry, they are fine and can be readily applied and incorporated with the soil. It is important with fertilizers of any kind to have them in such condition as to be readily applied and then to be in condition to be available to the growing plants. It is not the amount of plant food that is applied to the soil that benefits the plants, but the quantity that is made available. Good wood ashes can turn a considerable amount of available potash, and for some crops, especially those that require or need their elements of that plant food it can be applied by using wood ashes.

With small crops in the garden, like onions, lettuce or any of this class, the better plan is to apply broadcast, either just before sowing the seed or after preparing the soil in good tilth, or as a top dressing after the seed is sown. With large crops, like peas or beans, apply directly in the drill working well into the soil before planting the seed. Potatoes can, in a majority of cases, be considerable benefitted by an application of a small quantity in the hill before planting the seed. With raspberries and strawberries among the small fruits an application of a small quantity around each plant early in the spring will prove a considerable benefit. They can be applied upon the surface, and in cultivating, be well worked into the soil. They are very valuable applied around pear trees, aiding materially to keep in good health and in maintaining a good growth. They can be used to good advantage with fruit trees of all kinds whether applied as a top dressing near the trunk, or scattered broadcast and worked well into the soil. Considering the work of saving and applying they are one of the best fertilizers that can be secured and applied.

Agricultural Items.

THE oat crop of Tennessee and Kentucky will be a failure, owing to unfavorable weather and the work of the grain louse. Considerable of the acreage has been plowed up and sown to millet.

THE plant louse, or grain aphis has been quite numerous in Kentucky wheat and cornfields this season. It is thought the wheat will ripen up all right, but the damage to the young corn will be quite great.

A CORRESPONDENT of the *Allegan Gazette* says many farmers in Martin township are covering their potatoes this year with a thick coating of straw. Some plow and plant them, putting on the straw, while some plant upon the sod without plowing, covering deeply with straw.

W. F. BROWN is strongly in favor of restraining the potato bug by hand-picking. By going over the field as soon as the old ones appear in the spring, the supply of young ones is greatly lessened and at the second picking but few adult beetles are found. The hand-picking must be done early, before many eggs are laid.

"SAM" says: "Of what earthly use is there in asking a woman with a few cows, no conveniences, and less real butter-making knowledge, to slave all summer to make a little seven per cent summer butter? 'Oh, to buy groceries with!' Swap your butter for adulterated groceries." The remedy suggested is creameries.

THE great want of the dairy over a large part of our country is not more cows but better cows better tended. The times call for intense methods in conducting the dairy, and the call is far reaching, going down to the root of things, affecting alike the cow which produces, the food and the methods of dispensing the same, from which the milk is produced.

THE Argentine Republic has so far been the best consumer of American agricultural machinery, with England, Russia, France and Australia following. In Scotland, American machines are making some headway. Spain promises an excellent market for the introduction of American manufacturers of this kind. In that country, agriculture is very depressed and poor, a condition to be remedied by better methods and more knowledge, which bring improved implements in their train.

A BERLIN newspaper states that the Russian government has resolved to shortly increase the duties on several foreign articles, amongst others on agricultural machines, so that the import on such machines will in the future become practically impossible. The secret intention of the government seems to be to force foreign manufactories to establish in Russia manufactories large enough to provide for Russian wants, until the Russians themselves learn to make agricultural machines without foreign assistance. Some large Belgian factories have already taken the necessary steps, and are establishing branches in Russia.

The Poultry Yard.

The Diet-Cure for Ducklings.

A common complaint of ducks and ducklings is inability to stand through a weakness of the legs. The cause of this in a majority of cases is highly concentrated food, too large a proportion of grain and meat, and not enough vegetable matter. The food of the duck, when ranging in streams and meadows, their favorite haunts, consists of frogs, fish, worms, insects, and grain. With this diet they also get an abundance of gritty material, such as sand, gravel and the shells of small shell fish.

When we attempt to keep ducks in unnatural surroundings, we must not fail to imitate nature in the manner of feeding. That they can be reared in very small pens without loss from leg weakness or other diseases, has been demonstrated by the success of James Rankin, who grows ducklings with profit by putting 100 in a yard 10x100 feet in extent. The writer has also demonstrated it to his own satisfaction on a smaller scale.

Success, however, cannot be attained by feeding corn meal and water and meat scraps. A method we have seen attempted with disastrous results.

Corn meal, cracked corn and whole corn are all wholesome, but the meal should be combined with an equal bulk of bran, and whole wheat be fed with the whole corn.

Cabbage may be fed raw; but for ducklings should be chopped fine.

Turnips, beets and potatoes are best boiled and mixed with meat.

Hay should be cut short, scalded, and mixed with meal.

Green cornstalks, lettuce, and other garden greens, should be cut fine and fed in a raw state.

Beef scraps should be boiled with vegetables or boiled alone and the broth thickened with meal.

If milk is obtainable make mush of the meal, and feed with skim milk once a day. Nothing in this bill of fare will cause ducklings to grow faster than mush and milk. It may be advisable to boil the milk to counteract its loosening effect on the bowels.

If, with the above articles, ducklings have water and grit, they will seldom suffer from leg-weakness.

The intelligent feeder will soon learn the proper quantity of food to give his flock. Raw vegetables and whole grain may be kept before them at all times, but dainties, like mush and milk, or cooked vegetables and meat scraps should be fed but once or twice a day, and only so much as will be eaten up clean.

For ten or fourteen days before they are sent to market, the proportion of cornmeal in their diet should be largely increased.—*Farm Journal.*

THIRTY hens, says Galen Wilson, in the *N. Y. Tribune*, are more profitable for the average farmer than a greater number. The model hen is one that will lay the year round, if winter quarters and feed are suitable, except for about three weeks at moulting time; her body should weigh at least four pounds, and she should not be so clumsy that she cannot fly up to the perch; she should stand erect. I discard every hen with legs wide apart and a drooping abdomen; they are invariably poor layers. The model hen should produce large eggs, rather round than long, and should lose but three days between litters, whether broody or not; she should wean her chicks when their bodies are full-fledged, and not before; should be a good forager, and seek her own food from June to October; should not be "scary," but come up near when fed or called; should be a good sitter, and not fight and fly off the nest when approached while incubating or hovering her chicks. Such real, good, motherly hens should be bred for, and the good can be gained only by close attention and the most rigid selection and rejection.

A LITTLE charcoal, broken fine, and fed in soft food aids digestion, thins the blood, makes bright red combs; set it down as right that a chicken with such condition is healthy. Don't neglect this.

MORTGAGE SALE.—Default having been made in the conditions of a certain mortgage, made and executed by Frank Blumenthal, of the city of Detroit, Wayne county, Michigan, to Horatio C. Harrower, of the city and State of New York, bearing date the 12th day of February, A.D. 1883, and recorded in the office of the Register of Deeds for Wayne County, Michigan, on the 12th day of February, A. D. 1883, in liber 184 of mortgages, on page 17, which said mortgage was duly assigned by Horatio C. Harrower to Mary E. Harrower, of the city of Albany, State of New York, by assignment in writing bearing date the 18th day of May, 1885, and recorded in liber 24 of assignments of mortgages, on page 103, in the office of the Register of Deeds for Wayne County. Upon which mortgage there has been paid the sum of eleven hundred dollars principal and the interest due on said eleven hundred dollars. The premises described in said mortgage are lots number 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132 and 133, in William C. Maybury's sub-division of lot ten (10) of Theodore J. and Dennis J. Campau's plat of the sub-division of fractional sections 29 and 32, town one south, range twelve east. A part release of said mortgaged premises bearing date March 12th, 1889, was made and executed, releasing all of said mortgaged premises except lots 121 and 122, which part release was recorded on the 14th day of March, 1889, in liber 33 of discharges of mortgages, on page 504. There is now claimed to be due on said mortgage the sum of two hundred dollars principal and fifty-five and 19-100 dollars interest, and no suit or proceedings at law or equity having been instituted to recover said moneys or any part thereof; now, therefore, by virtue of the power of sale contained in said mortgage and of the statute in such cases, made and provided, notice is hereby given that on Wednesday the 9th day of July, 1890 at 12 o'clock noon, at the westerly front door of the City Hall, in Detroit, the said City Hall being the place where the Circuit Court for the County of Wayne is held, I shall sell at public auction to the highest bidder the said mortgaged lots one hundred and twenty-one (121) and one hundred and twenty-two (122) or so much thereof as is necessary to supply the amount so remaining unpaid on said mortgage, with interest, legal costs and taxes paid by said assignee of said mortgagee.

Dated April 12, 1890.

MARY E. HARROWER,
Assignee of Mortgagee.
S. S. BABCOCK, Attorney for Assignee.

SHERIFF'S SALE—Notice is hereby given that by virtue of a writ of fieri facias, issued out of the Circuit Court for the County of Wayne, State of Michigan, in favor of George Jerome, against the goods, chattels, and real estate of Emery Lewis and Abenty Lewis in said county, to me directed and delivered, I did on the twenty-eighth day of April, A. D. 1890, levy upon all the right, title and interest of Emery Lewis and Abenty Lewis in and to the following described real estate situated in the County of Wayne, State of Michigan, to wit:

That certain piece or parcel of land situate in the Township of Hamtramck, described as follows: Commencing at the southeast corner of the north-east quarter of quarter-section eighteen (18) of the ten thousand acre tract; running thence westerly along the south line of said northeast quarter thirty-nine (39) rods: thence northerly at right angles to said south line eleven (11) rods; thence easterly and parallel with said south line thirty-nine (39) rods to the east line of said quarter section; thence southerly along said east line eleven (11) rods to the place of beginning, containing four hundred and twenty nine (429) square rods of land all in Wayne County, Michigan, all of which I shall expose for sale at public auction or vendue to the highest bidder, as the law directs, at the westerly front door of the City Hall, in the City of Detroit, County of Wayne and State of Michigan, that being the place for holding the Circuit Court for the County of Wayne aforesaid, on Wednesday, the 23d day of July, A. D. 1890, at twelve o'clock noon.

Dated Monday, June 2d, 1890.

LOUIS B. LITTLEFIELD, Sheriff.
By BENJ. F. BRISCOE, Deputy Sheriff.
FRANK D. ANDRUS, Plaintiff's Attorney.

SHERIFF'S SALE—Notice is hereby given that by virtue of a writ of fieri facias, issued out of the Circuit Court for the County of Wayne, State of Michigan, in favor of J. S. Lapham & Co., against the goods, chattels and real estate of James Chase, in said county, to me directed and delivered, I did on the 28th day of March, A. D. 1890, levy upon all the right, title and interest of James Chase, in and to the following described real estate, situated in the County of Wayne, State of Michigan, to wit:

Land in the Township of Plymouth, in the County of Wayne and State of Michigan, known and described as the south one-half (½) of the northeast quarter (¼) of the southwest quarter (¼) of section seventeen (17) and the southeast quarter (¼) of the southwest quarter (¼) of section seventeen (17) all in Wayne County, Michigan, all of which I shall expose for sale at public auction or vendue to the highest bidder, as the law directs, at the westerly front door of the City Hall, in the City of Detroit, County of Wayne and State of Michigan, that being the place for holding the Circuit Court for the County of Wayne aforesaid, on Wednesday, the twenty-third day of July, A. D. 1890, at 10 o'clock in the forenoon.

Dated Monday, June 2d, 1890.

LOUIS B. LITTLEFIELD, Sheriff.
By BENJ. F. BRISCOE, Deputy-Sheriff.
GEO. B. YERKES, Plaintiff's Attorney.

Detroit, Grand Haven & Milwaukee.

Depot foot of Brush Street. Trains run by Central Standard time. May 5, 1890.

	Depart.	Arrive.
*Grand Rapids and Muskegon	6:50 a m	*4:30 p.m
*Through Mail & Chicago	10:20 a m	*9:45 p.m
Steamboat Express	4:30 p m	*11:55 a.m
†Chicago Ex. with sleep'r	8:00 p m	†7:45 a.m
†Night Ex. with sleeper	10:30 p m	†7:20 a.m

* Daily, Sundays excepted. † Daily.

Trains leaving Detroit at 6:50 and 10:20 a m, 4:30 and 8:00 p m connect at Durand with trains on Chicago & Grand Trunk R'y for Chicago and the West.

Morning express has elegant parlor cars to Grand Rapids.

Steamboat express has Wagner parlor buffet car to Grand Haven.

Chicago express has Pullman sleeper and Buffet car Detroit to Chicago daily.

Night express has sleeper to Grand Rapids daily.

Sleeping car berths can be secured at G. T. R. Ticket office, Corner Woodward and Jefferson Avenues, and at Depot foot of Brush Street.

W. J. SPICER, General Manager, Detroit.
E. J. PIERCE, City P. & T. Agent, Detroit.

WABASH RAILROAD.—Passenger station foot of Twelfth St. Try the Wabash Short Line to Chicago and the West. Standard time.

Depart.		Arrive.
*8:25 a.m.	..Wabash Western Flyer..	*6:45 p.m
§1:55 p.m.	........Chicago Limited......	§11:30 p.m
§1:55 p.m.	St. Louis Limited Express.	§9:35 a.m
‡4:00 p.m.	Adrian & Butler Accommodation.	
§9:50 p.m.	...... Chicago Express......	§6:15 a.m.
§9:50 p.m.	St. Louis and Western Express	§11:30 p.m

§Daily. *Except Sunday ‡Except Monday.

Horticultural.

THE PLUM GOUGER.

Prof. C. P. Gillette, in a bulletin issued from the Iowa Agricultural Experiment Station, on the plum gouger and curculio, says:

As no carefully conducted experiments have ever been made for the purpose of determining the value of the arsenites for the destruction of the gouger, and as it is not yet sufficiently proven that these poisons can be depended upon to destroy the curculio, I thought it advisable last spring to test the effect of London purple on these pests. For that purpose I chose five native trees (one Rollingstone, one De Soto, one Maquokets, one Speer and one seedling) to be treated, and five other natives (all Miners) of about the same age and size as checks. The check trees were about fifty rods distant from those sprayed. I could have taken trees for checks in the immediate vicinity of the sprayed lot, and of the same varieties, but in taking the Miners I thought I was choosing the lesser of two evils. It is impossible to know what effect the difference in location and varieties might have had on the severity of the attack. We know that both of these beetles, especially the gouger, are quite active and pass freely from tree to tree. So that when a part of the trees in an orchard are poisoned and a part not it is in all probability true that many of the beetles that are poisoned upon the treated trees would lay a part of their eggs on the untreated trees, and conversely, beetles feeding upon untreated trees would lay a portion, at least, of their eggs in the fruit of the treated tree. As a result of these conditions the treated trees would have more stung fruit than if all the trees were treated, and the check trees would have less fruit stung than if none of the trees near them had been sprayed. How considerable the error from these sources would be no one is able to say, but that such an error must always exist can not be doubted. There is another possible cause of error when sprayed and check trees are near each other, especially where several sprayings take place, and that is to drive the beetles from the sprayed trees and to cause them to accumulate unduly on unsprayed trees. In fact, the unavoidable sources of error in an experiment of this sort are so many that accurate results can only be reached by generalizing from a large number of carefully conducted experiments extending through several years. It is the opinion of the writer that the accurate results would be reached by having the checks, which should be of the same or closely related varieties, well separated from the sprayed trees, care being taken that they are as nearly as possible under the same conditions. For this reason I chose my checks as above mentioned.

The poison used was London purple, and it was applied by means of a Nixon Barrel Machine and No. 3 nozzle. A strong man worked the pump, and the dense floating spray emanating from the nozzle was directed to all parts of the trees until the leaves began to drip. The application, it seemed to me, could not have been more perfect. Two applications made. May 4, twenty-three plum trees were treated with London purple in water in the proportion of one pound to 120 gallons. Twenty gallons were used in making the application. A flour paste in the proportion of half a pound of flour to a gallon of the mixture was added before applying the mixture. Most of the trees were in full bloom, but a few of them had already lost most of their flowers. On May 11 the application was repeated in the same strength. At this time the more forward trees were loaded with small plums to which the dried calyxes were still clinging, while the more backward trees had only just lost their flowers. Too much poison was used in these applications, as the leaves were quite badly burned.

All plums that fell after May 25 were gathered at short intervals and closely inspected for curculio or injuries up to the time of the ripening of the fruit, when all the plums still on the trees were examined to complete the record.

The following conclusions as stated by Prof. Gillette, seem to be fairly drawn from the experiments and observations of the past summer:

1. The gouger appears upon the trees much earlier in the spring than does the curculio.

2. The gouger is much more injurious than the curculio to native plums on the grounds of the Iowa Agricultural College.

3. The gouger very much prefers the native to the domestic variety.

4. The examination of over 24,000 native plums, from not less than 18 different trees of many varieties, showed a little over 27 per cent of their fruit to be injured by the gouger.

5. The gougers take no food in the fall after emerging from the plums.

6. The gouger has at least one parasite that preys upon it while in the pupa state. The parasite is *Sigalphus canadensis*.

7. The season's experiments indicate that London purple, as recommended for the destruction of the curculio, is of little value for the destruction of the gouger.

8. The gouger is not able to come to maturity in fruit that falls before the middle of July.

9. Fruit infested by the gouger does not ripen or fall prematurely.

11. Jarring the trees and collecting the beetles and gathering stung fruit from the trees before the first of August are the best remedies at present known for the gouger.

12. The curculio prefers the domesticated to the native varieties of plums.

13. When eggs are deposited in native plums, the curculio develops as well in them as in the domestic varieties.

14. Native varieties are not a protection to domestic varieties. The fact that two yellow Mirabeau trees growing in the immediate vicinity of many natives had 65 per cent of their plums destroyed by the curculio, while the natives had less than 10 per cent of their fruit punctured, is sufficient proof of this.

15. That succulent, quick growing plums are not less attacked than slow-growing varieties.

16. The curculio develops readily in the Duchess apple.

17. The curculio is not double brooded in Iowa, but the eggs deposited late in July and August are from belated females.

18. The two applications of London purple in water, although not made at the time best suited to destroy the curculio, apparently gave a protection of 44 per cent against the ravages of this insect.

19. London purple in water in proportion of one pound to 120 gallons is much too strong a mixture for plum trees. One half this strength is as strong as should be used.

WASHTENAW POMOLOGY.

Experiment Station—Committee on Transportation—Fruit Prospects—Exhibit.

At the meeting of the Pomological Society last Saturday the topic of establishing a branch of the experiment station at Ann Arbor and vicinity was discussed.

Very few people have an idea of the experimentations with different fruits and plants by individual efforts of pomologists and horticulturists. For this reason have the officers of this society from time to time advocated the necessity of a branch of the experiment stations, successfully pursued at the public expense by the different departments at our Agricultural College at Lansing.

The Hon. Edwin Willits, ex-President of the Agricultural College, was especially instrumental in carrying a measure by Congress known as the "Hatch law" which was signed by the President, Jan. 1, 1888. This act provides an annual appropriation of $15,000 to each State and Territory of the U. S. for the establishment of experiment stations in agriculture and its kindred branches. In this and I suppose in other States these experiments are under the supervision of the State Agricultural Colleges.

Very instructive and useful bulletins like "No. 57," by L. R. Taft, Professor of Horticulture at our Agricultural College at Lansing, and "Injurious Insects," by Prof. A. J. Cook, the genial zoologist of the College, and bulletins of great merit by other members of the faculty, are the results of these experiments.

President T. T. Lyon, of the State Horticultural Society, in his annual address (see page 25 of State Horticultural Report of 1888) refers to these experiments: "It may reasonably be anticipated that with the special and recognized horticultural standing of this State, horticulture and especially pomology will be made a prominent feature of its system of experimentation. There is, however, a very serious, if not in fact insurmountable, obstacle in the way of successful pomological experimentation at the College, namely, the location of the institution in the low and frosty valley of the Cedar River, where only the more hardy fruits can be successfully grown. We are not informed as to the plans of the responsible managers with reference to this difficulty, but it would seem requisite, in consideration of the very important commercial fruit interests on the lake shore as well as in other regions thus practically shut out from the benefits of experimentation at the college, that a plan be devised, by a system of outside experimentation or otherwise, to confer upon so important an interest a reasonable share of such benefits."

Prof. V. M. Spaulding, the botanist of our Society, remarked in this connection on this topic that, in view of the climatic and topographical advantages of this region and adjoining counties of the State, facilities in carrying on experiments would be very welcome in this vicinity where nature has done so much for the horticulturist and where our hill sides are covered with thousands of peaches, pears, apples, plums and other fruit trees.

Messrs. Ganzhorn and Baur pointed out the advantages of this place from the fact, that the numerous results from practical experimentations would by the aid of systematic and scientific assistance given by the scientists of the State university, accrue to the common good of our State and that students of these sciences would at once be induced to enter upon a field of research of a practical nature.

The chairman of the meeting, Mr. J. J. Parshall, appointed E. Baur, V. M. Spaulding and J. Ganzhorn a committee to look into this matter and report next meeting.

President J. D. Baldwin addressed a letter to the undersigned asking for a good first rate committee on transportation. The chair appointed Messrs. E. H. Scott, L. Gruner and W. F. Bird for this committee, which is requested to report, if possible, next week to the corresponding secretary, who is to publish their report in the county press.

Mr. Ganzhorn reported as follows on fruit prospects: Black raspberries a failure; red, promising; seedling peaches, badly curled; budded trees, not much curl, full of peaches.

Mr. Parshall—95 per cent of a crop of peaches; Barnards, badly curled. Baldwin apples, average crop; pears, very scarce; other apples very scarce.

Wm. McCreery—Peaches loaded, needs a spy glass to find one apple; expects five bushels from all his apple trees.

W. W. Nichols—Average crop of Baldwins, peaches very promising; no pears.

E. Baur—Jonathan, not one apple; Baldwins, one-third crop. Early Astrachan apples good prospect; Bartlett pears improving; Flemish Beauty, failure; Giffards, average crop; Clapp's Favorite, nearly all killed by blight; Duchess, not a pear.

John Allmand—Strawberries, one-half of a crop; black raspberries, failure; red, promising; peaches, Oldmixon and all white varieties and late Crawfords, plenty.

B. J. Conrad—Peaches very promising on old trees; young trees scarcely any.

S. Mills and E. A. Nordman—Apples a failure.

Mr. J. J. Parshall ascribed the apple and pear failure to heavy east winds with cold rains during blossoming time, which observation is based on fifty years of experience.

EXHIBITS.

John Allmand's exhibit of strawberries was a surprise. Bubachs as big as apples; Belmont, Sharpless, Jesse and Mount Vernon very fine; Wilson and Woodruff failing: two new promising seedlings.

Luther Palmer, of Dexter, showed the largest Jesse; his Jewell and Belmont were also fine.

Mr. Ganzhorn exhibited cherries. May Duke for canning; Napoleon Bigarreau, sweet, delicious; Governor Wood, sweet, sprightly.

All were greatly pleased with this exhibit. Fruit growers should attend the meetings of the Society for their own benefit.

EMIL BAUR, Cor. Sec.

For the Michigan Farmer.

HOW TO RAISE SWEET POTATOES AND YAMS.

Most everybody can raise sweet potatoes and yams, which greatly add to the makeup of vegetable delicacies in early fall, and are fresh from their own garden. The culture is very simple. The most essential part is to select rich soil, sandy if possible, then make your ridges low and small, don't stir the ground up too deep, as deep loose ridges will make long slim tubers. The best results in giving immediate growth and vigor to the plants, is by making a mixture of fresh cow manure one part and clay soil two parts, thinned by adding water until when a plant is inserted it will adhere thick to the roots, then treat each plant, setting them deep to the first twigs and about one foot apart in the ridges, which should be made four feet apart. After each hard rain the dirt should be stirred around the plant and as the plant advances give it more dirt; when large enough to cultivate the ridges, it can be done best by using a rake handle to throw the vines together and working alternate rows. In Ohio planting should be done by July 1st. Should we have an early frost the vines must be cut off immediately before the sun strikes them as it will ruin the crop. Should your soil not be rich enough then a little fertilizer should be used to insure a good yield.

HENRY SHULL.

FRUIT EVAPORATION IN AMERICA.

A recent number of the *Horticultural* (Eng.) *Times* contains a paper describing the fruit evaporating industry of this country, as conducted in New York and California and commenting upon its features as related to English fruit-growing. This correspondent says that in 1888 there was prepared 37,750,000 lbs. of dried fruits—apples and black raspberries—valued at £297,000. Two hundred and fifty millions of pounds (111,000 tons) of green apples, and two hundred and fifty thousand quarts of fresh raspberries were operated upon; nineteen thousand tons of coal were burnt in fifteen hundred drying-houses, of various capacities, and forty-five thousand hands were employed, during four months of the year, in bringing about the above result.

What the olive is to Spain, the orange and lemon to Italy, the vine to France, and the fig to Syria, such is the apple to America. That portion of the United States lying between the thirty-eighth and fortieth parallels of latitude is the natural home of this valuable fruit. Nowhere else in the world, probably, does it attain to such perfection; nowhere else is its cultivation so well understood, or its quality and yield surpassed. Scarcely any fresh apples were exported from America before 1870, when the drying process was unknown, but a million barrels are now sent annually to Europe, where they compete successfully with home-grown fruit on account of their large size and excellent flavor.

But it is not only in western New York, or in apples and raspberries alone, that the business of fruit-drying is flourishing in the States. California, long known as a fruit-growing and fruit-canning State, has taken up the evaporative process during recent years, and is exploiting it with characteristic western energy. In the genial climate of the Pacific coast, grapes, nectarines, figs, apricots, and peaches are cultivated to great advantage, and with these fruits—more valuable than the apple, which, however, she also produces—California is now entering the evaporated-fruit markets of the world.

During 1888 there was evaporated in California 31,450,000 lbs. of fruit, valued at £431,590, raisins forming the largest item. These are rapidly supplanting, in the States, raisins of Spanish origin, and their production has increased from 120,000 lbs. in 1873, to 18,500,000 lbs. in 1888! This is, indeed, advancing by "leaps and bounds."

Peaches, which come next in value, would figure for a much larger sum, but for the fact that so many Californian peaches are canned.

It may be remarked, in passing, that western New York was once also a great peach-growing country, but a disease known as "the yellows," as deadly in its field of operations as the *phyllozera* itself, has desolated the peach-orchards of a region which otherwise would probably have doubled the value of its dried-fruit product, by adding an output of the more costly fruit to that of apples.

The figures show that the average value of Rochester evaporated fruit did not exceed 2d. per lb. in 1888, while the Californian product netted 3½d. per lb. all round—prices which sound low when it is borne in mind that it takes eight lbs. of fresh fruit to make one lb. of evaporated apples. On the other hand, apple-rings sometimes sell for from 50s. to 60s. per hundredweight in the English market.

It is a suggestive fact that there were no fruit-drying factories in America fifteen years ago, and none in California ten years ago. In the latter case a trade of nearly half a million sterling has been added to the previously existing industries of the State; and created out of what was formerly for the most part waste—viz., the many tons of fruit which, in pre-evaporator days, rotted before they could reach a market.

Comparing the state of things, thus roughly disclosed, in two States of the Union, with what is being done to-day in our own country towards the culture, curing, and distribution of fruit, three things cannot be denied.

Aside from certain limited areas, of which the Vale of Evesham furnishes a good example, the culture of fruit is stationary in England, curing by artificial heat is practically unknown, and distribution is clumsy and costly.

Devonshire, for instance, our chief apple-growing county, has added only a few hundred acres to her orchards during the last ten years. Her trees are, for the most part, old, of poor sorts, bearing small and inferior fruit, often decaying and moss-grown. They stand close together, the grass grows thick between them, and they are cultivated much in the same way now as they were a century ago. Meanwhile, it probably costs a Devonshire man more to send his apples to London than his American competitor pays for freight from New York or Boston to the same place.

If we ask ourselves, "Whence the contrast between the two countries?" I think the answer must be twofold—Americans generally are more alert than their English competitors, more quick to see and seize upon new openings for trade; while the American farmer is in addition a freeholder who cultivates his own soil.

Following the advice of a recent speaker on this subject, himself a scientific and successful fruit-grower as well as a landowner, I forbear from speculating on the question—"How far the fact of the American farmer being also an owner has determined his greater success in this field of industry." But it must be remarked that the Vale of Evesham already alluded to, where custom gives "the gardeners," who are all tenants, not only an actual ownership of their improvements, but a practical ownership of the soil itself, is the site of a very prosperous fruit-growing industry, and the home of many well-to-do fruit farmers. Is this one to sun, situation and soil—to three S's or to three F's?

Spraying for Pear-Leaf Blight.

It is gratifying to learn that a very effectual remedy and preventive of leaf blight on pear trees, which has been one of the chief discouragements in pear growing, has been found in one of the spraying compounds, the Bordeaux mixture. And it is no less gratifying that another evil, the pear scab, may also be remedied by the same means. The latest issue from the pathological department of the U. S. Horticultural Bureau, gives practical information and directions as follows:

"The seedlings are especially subject to leaf blight, but are hardly ever, so far as we know, seriously injured by scab. As the two diseases, however, are usually associated on large trees, and as we have used the Bordeaux mixture successfully on the seedlings, we would suggest that it be adopted for all and applied as follows:

"Seedlings.—Make five applications, the first when the leaves are one-quarter grown, others at intervals of ten days until the trees are budded.

"Large trees.—Spray five times; first when the fruit is the size of peas, and thereafter at intervals of twelve or fifteen days.

"For applying the mixture to trees less than 12 feet high, and especially to seedlings in the nursery, the knapsack pumps provided with improved Vermorel lance and nozzle will answer.

"When the trees are large and in considerable numbers it will pay to get a strong force-pump, mount it on a barrel, and place the whole on a wagon or cart to be moved about at pleasure. In all cases, however, it will be necessary to use the Vermorel nozzle, as it is the only nozzle of value that will not clog; it can readily be attached to almost any force pump, and will be found to be a very effective piece of machinery.

"The total cost of a course of treatment such as is outlined above, including labor in preparing and applying the remedies, will be for nursery stock about $3 per 1,000 trees. For large bearing trees the cost will run from six to twelve cents per tree. In case the Bordeaux mixture shows on the fruit at the time of harvesting, it can easily be removed by washing in water.

"In addition to the foregoing it would be well to rake the old leaves and fruit together in the fall and burn them, as in this way thousands of reproductive bodies will be destroyed."

Planting Dwarf Pears to Become Standards.

The quince cutting forming the stock is usually almost a foot long, and the trees must be planted so deep that it is not an easy matter, and unless the soil is deep and rich is not always a success.

Many years ago I bought some dwarf pear trees with the stem of the root not more than three or four inches long. On asking the man (as he was simply an amateur), how he managed to grow such short cuttings he stated that he made rather short cuttings in the first place, then when budding, he removed the earth away from around the trees, inserted the bud an inch under ground, replaced the earth and banked up an inch or two more. This done in August, the quince stock would emit roots above the bud, so that in the spring he would have a rooted cutting for every budded stock. Cut off close above the bud, cement the stub, and when the bud has grown a few inches, fill up with earth again.—*Judge Miller, in Nebraska Horticulturist.*

Horticultural Items.

CHERRIES succeed better in grass than most other fruit trees. At least the trees grow well when once started; but in recent years birds often foreclose on the crop.

IT is said that from a handful of mold and a sprout of a pineapple stuck anywhere on a coral rock in Florida, there will in 18 months be produced a good pineapple.

ENGLISH fruit-growers are greatly troubled this year by an unusual amount of insect depredators. Last year was bad enough, but this season's attack is worse and will be more damaging because of the weakened condition of the trees.

IT is a little singular, but English gardeners and fruit-growers are slow to learn the virtues of London purple and Paris green as insecticides. They are now being forced to resort to them, so great is the devastation of the caterpillar.

ONE method by which the germs of peach and apple blight gain an entrance to the trees is through cracks or injuries to the bark. H. Reynolds says a sulphur wash applied to the trunk and large limbs will prevent such entrance.

CALIFORNIA orange-growers report wonderful profits from their groves. The land is held very high, but the profits of an orange grove, if one may believe reports, is immense. Net profits range from $200 to $800 and $700, and in an exceptional case, to $1,000, on lands held at $350 to $800 an acre, with water.

GUM about the collar of the peach tree, particularly if flecked with what looks like sawdust, indicates the presence of the borer. Bare the collar, scrape the gum and dirt away, wait a day, and fresh sawdust will be seen about the hole in the bark in case the insect is there. Explore the residence with a knife or piece of stout wire, and his occupation is ended.

MR. MEEHAN, in an address before the American Association of Nurserymen, referred to the erroneous belief which prevails, that trees with fibrous roots are of more value than trees without them. Such roots he said were of very little permanent use. Like the leaves of a tree, they performed their function for a year, and then died. When a tree was transplanted from a nursery, the loss of the fibrous roots which were left behind affected it very little, and it was in just such things as these, Mr. Meehan said, that nurserymen did not advance and learn the true value of things.

THE Minnesota Horticultural Society has been discussing the blueberry question. H. E. Van Deman said the blueberry grew wild over almost all of Minnesota, and by properly treating wild plantations they might be made very profitable, as has been done in New England. The quality as well as the quantity is greatly increased. Other bushes are cut and cleared away, and the ground burned when wet below. He did not think it could be successfully treated by transplanting. Col. Stevens said that he had known it successfully cultivated in Minnesota. Mr. McCumber took up fifty bushes and set them in his garden, and they grew. He had never seen any wild ones bear better. Prof. Green said that transplanting in New England had not been very successful. Mr. Barrett had tried a hundred roots, but failed. They were dug in the fall, and heeled in.

B. T. GALLOWAY, of the U. S. Agricultural department, in reply to an inquiry for a remedy for bitter rot in apples, made answer as follows: The best results were obtained with the ammoniacal carbonate of copper solution and a solution of sulphide of potassium. The first is made by dissolving three ounces of carbonate of copper in two quarts of strong ammonia and then diluting to 22 gallons; the second is prepared by dissolving an ounce of sulphide of potassium, or liver of sulphur, to the gallon of water. The trees were sprayed four times, first when the fruit was about grown and thereafter at intervals of ten days. The preparations were applied with the Lewis combination force pump at a total cost of about three cents per tree for each spraying. If you intend to treat your trees for bitter-rot I would suggest that you use the ammoniacal solution, as it is likely to prove of more value in case the season should be wet.

Apiarian.

PROSPECTS OF THE SEASON.

Taking into consideration the open winter, the season thus far in Michigan, and in fact nearly all over the United States, has been discouraging. The open winter induced breeding, and a consequent unusual consumption of stores. This condition kept the intestines of the bees constantly loaded so that were they confined to the hive a few days they suffered more than they ordinarily would in as many weeks. This accounts for so many colonies dying after spring had fairly set in.

Fruit bloom was abundant and lasted a long time, but the atmospheric conditions were not favorable to the secretion of nectar; then we have lost millions of bees at a time when we can ill afford to by the ignorant, yes, and malicious, spraying of the trees while in full bloom. Of course the intelligent fruit-grower knows it does no good to spray the trees until about the time the bloom is falling, and at a time when the bees have fulfilled the mission the Creator intended them for. I know of no other way to educate the ignorant and malicious than to demand legislation for the protection of our property. I notice some of our supervisors and boards of review have no conscientious scruples about leving even an enormous tax upon us. I paid taxes on an assessment of $950.00 on 100 colonies the past season, and hold the receipts in proof. Are we then not entitled to protection? I say yes, and shall expect at our next State convention to see measures taken to secure it.

Since fruit bloom I never saw such a dearth of nectar. Vegetation seemed to suspend operations, and now at this writing, June 20, the raspberry, blackberry and white clover are all upon us at once with only half as many bees as a rule in the hives as there should be and would otherwise have been to gather the harvest. Many colonies have starved or dwindled during the later part of May and first of June. In some parts of Iowa, Illinois, Ohio and Kentucky whole apiaries have been swept away by devastating floods. New York and adjoining States have suffered heavy losses from cellar wintering, and on the whole a dark cloud covers the horizon of the beekeeper.

But don't be discouraged; it has a silver lining. The markets have not been so denuded in years, the demand for honey is upon us before we have it gathered; quick sales at good prices are a stimulus to do our best. Let us double up our sealed brood and make one good colony from two medium ones. When they swarm give the brood to weak colonies having a queen, and before the season is half gone we will have our colonies strong and a fair crop of honey, with but little outlay for hives and fixtures. Never mind the increase; get the honey first, then if you must have increase make it later. I know this is not a policy standpoint for a supply dealer, but I believe it will bring the greatest good to the greatest number. So let us trust in God, friends, and keep our dishes right side up and He may yet send us such a flow of honey that we will be put to our wits' end to care for it.

GEO. E. HILTON.

FREMONT.

MICHIGAN FARMER,

—AND—

STATE JOURNAL OF AGRICULTURE.

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MICHIGAN FARMER AND STATE JOURNAL OF AGRICULTURE

DETROIT, SATURDAY, JUNE 28, 1890.

This Paper is Entered at the Detroit Postoffice as second class matter.

WHEAT.

The receipts of wheat in this market the past week amounted to 62,015 bu., against 90,120 bu. the previous week, and 38,155 bu. for corresponding week in 1889. Shipments for the week were 68,133 bu., against 104,605 bu. the previous week, and 37,000 bu. the corresponding week last year. The stocks of wheat now held in this city amount to 165,398 bu., against 188,767 bu. last week, and 27,583 bu. at the corresponding date in 1889. The visible supply of this grain on June 21 was 21,088,719 bu. against 21,578,141 bu. the previous week, and 16,448,388 bu. for the corresponding week in 1889. This shows a decrease from the amount reported the previous week of 489,422 bushels. As compared with a year ago the visible supply shows an increase of 4,640,331 bu.

It was a weak market yesterday, and it is a wonder, under the circumstances, that a greater decline did not take place. The weather was favorable, other markets weak and drooping, and no sustaining reports were forthcoming from any source. Late futures are relatively stronger and hold steadier than cash and near futures, which are depressed by the near approach of the time when new wheat may be expected. Yesterday Chicago declined ¾@1c, St. Louis ¾@⅞c, and New York ⅞c. The "visible supply" is still considerably larger than a week ago, and this has a weakening influence. But we believe the winter wheat crop will be so short this year that any held over wheat will be wanted at higher prices.

The following table exhibits the daily closing sales of spot wheat in this market from June 2d to June 27th inclusive:

		No. 1 White.	No. 2 Red.	No. 3 Red.
June	2	92¼	92⅛	88⅛
"	3	92⅛	92⅛	89
"	4	92⅜	91½	88
"	5	91⅛	91⅛	87
"	6	91½	91½	87
"	7	91½	91⅛	87
"	9	91⅛	91⅛	86
"	10	90⅛	91	84
"	11	89⅛	89⅜	83
"	12	88⅛	89	....
"	13	88⅜	89⅛	....
"	14	88⅜	89⅛	83
"	16	87½	88¼	81
"	17	87	87⅜	81
"	18	87½	88¼	....
"	19	....	87⅜	81½
"	20	87	88⅛	81½
"	21	86¾	88	81
"	23	86	87¼	79¼
"	24	86	87⅜	80½
"	25	86¼	87⅜	....
"	26	86⅜	88	....
"	27	86⅜	87¼	80

No. 2 white sold at 81¼c, No. 3 white at 76c, and rejected at 65@73c. Rejected red closed at 65@73c.

The following is a record of the closing prices on the various deals in futures each day during the past week:

	June	July	Aug.	Sept.
Saturday	88	88	87⅜	...
Monday	87¾	87¾	86⅝	86⅜
Tuesday	87	87	86⅝	86⅜
Wednesday	87¼	87½	86⅞	86⅞
Thursday	88	88	87¼	88¼
Friday	....	87½	87¼	87½

Late repotts from the Northwest say the weather in that section is all that could be desired for rank growth and rust. A great deal of crop damage is reported to have been done by the storm of Monday night in Northern Iowa and Southern Minnesota.

Around Kinsley, Iowa, farmers report a great deal of rust in the wheat, and some say their crop will not be worth 25c per bu.

The Inter-State Commerce Commission have ordered Western railroads to reduce rates on grain. Now, let them reduce the rates between the middle States and the seaboard so as to give farmers in those States an equal chance.

The Winnipeg *Commercial* says that everywhere in Manitoba there is a promise of a grain yield as heavy in proportion to the acreage as the crop of 1887, and every field is progressing with wonderfel rapidity. The first half of August will decide all doubt, for if the first two weeks of that month are free from frost, a yield phenomenally heavy may be confidently looked for.

The following is a summary of the official crop report, issued last Sunday in St. Petersburg: The condition of crops in the greater part of Russia is good, and in several places very good: In Poland, Baltic Provinces, winter crops promise an average harvest. Winter wheat in six or seven districts of the middle loam provinces perished to the extent of about 50 per cent.

The Mark Lane *Express* of Monday last, in its weekly review of the British grain trade, says:

"English wheats are dull at a decline of 6d. The sales of English wheat for the week were 44,229 quarters at 32s. 9d. per quarter against 57,337 quarters at 32s. 8d per quarter for the corresponding week last year. Flour is weak and 6d. lower. Foreign wheats are depressed. Red winter grades are 2d. lower, and Indian and Russian 6d. lower. Round corn has declined 3d. Barley is 6d. lower. Oats are firm."

The estimated receipts of foreign and home-grown wheat in the English markets during the week ending June 14 were 2,141,600 bu. less than the estimated consumption; and for the eight weeks ending May 31 the receipts are estimated to have been 2,483,040 bu. more than the consumption. The receipts show an increase for those eight weeks of 1,657,744 bu. as compared with the corresponding eight weeks in 1889.

The following table shows the quantity of wheat "in sight" at the dates named, in the United States, Canada, and on passage to Great Britain and the Continent of Europe:

	Bushels.
Visible supply	21,791,137
On passage for United Kingdom	23,808,000
On passage for Continent of Europe	7,168,000
Total bushels June 7, 1890	52,767,137
Total previous week	53,571,931
Total two weeks ago	52,322,003
Total June 8, 1889	33,908,181

Shipments of wheat from India for the week ending June 14, 1890, as per special cable to the New York Produce Exchange, aggregated 520,000 bu., of which 440,000 bu. were for the United Kingdom and 80,000 bu. for the Continent. The shipments for the previous week, as cabled, amounted to 740,000 bu., of which 460,000 bu. went to the United Kingdom, and 280,000 bu. to the Continent. The shipments from that country from April 1, the beginning of the crop year, to June 14, aggregate 5,360,000 bu., of which 3,520,000 bu. went to the United Kingdom, and 1,840,000 bu. to the Continent. For the corresponding period in 1889 the shipments were 5,720,000 bu. The wheat on passage from India June 3 was estimated at 2,616,000 bu. One year ago the quantity was 2,488,000 bu.

The Liverpool market on Thursday was quoted quiet, with light demand. Quotations for American wheat were as follows: No. 2 winter, 6s. 10½d. per cental. No. 2 spring, 7s. 1d.; California No. 1, 7s. 0d. per cental.

CORN AND OATS.

CORN.

The receipts of corn in this market the past week were 7,785 bu. against 4,003 bu. the previous week, and 2,517 bu. for the corresponding week in 1889. Shipments for the week were 8,268 bu. against 6,265 bu. the previous week, and 13,150 for the corresponding week in 1889. The visible supply of corn in the country on June 21st amounted to 15,621,320 bu., against 16,204,224 bu. the previous week, and 9,834,399 bu. at the same date in 1889. The visible supply shows a decrease during the week indicated of 582,804 bu. The stocks now held in this city amount to 7,063 bu. against 9,431 last week, and 27,925 bu. at the corresponding date in 1889. Corn has advanced during the week, and is now at the highest point reached on the present crop. No. 2 sold yesterday at 36½c, No. 3 at 35c, No. 4 at 34c, No. 2 yellow at 37½c, and had 38c bid at the close. In futures No. 2 for July sold at 35⅛. Corn is showing up well, and the present weather is all that could be asked for. The crop also looks well in other states. The State Agricultural Department says the area seeded to corn in Illinois is a little larger than that of last season, when it was 6,988,000 acres. The condition for the state over is 91 per cent of an average. At Chicago corn is steady, with values about the same as a week ago. Spot is quoted there as follows: No. 2, 34½c; No. 3, 33⅝c; No. 4, 31½c; No. 2 yellow, 34½c; No. 3 yellow, 34c. In futures quotations were as follows: No. 2 for June, 34½c; July, 34⅝c; August, 34½c; September, 35⅜.

The Liverpool market yesterday was quoted higher with moderate offerings. Quotations were as follows: Spot, 3s. 6d.; June, 3s. 6½d.; July, 3s. 7d.; August, 3s. 8d. per cental.

OATS.

The receipts at this point for the week were 21,296 bu., against 47,205 bu. the previous week, and 24,775 bu. for the corresponding week last year. The shipments for the week were 13,935 bu. against 10,569 bu. the previous week and 13,150 bu. the same week in 1889. The visible supply of this grain on June 21st was 5,001,147 bu., against 5,396,164 bu. the previous week, and 5,574,971 bu. at the corresponding date in 1889. The visible supply shows a decrease of 395,017 bu. for the week indicated. Stocks held in store here amount to 17,172 bu., against 22,551 bu. the previous week, and 20,851 bu. the corresponding week in 1889. Oats are again higher, and in good demand. Stocks are very light, and any sudden call sends up prices. No. 2 white sold yesterday at 33c per bu., light mixed at 32c, and No. 2 mixed at 31½c. In futures No. 2 mixed for July sold at 29c, August at 27½c, and September at 27c, per bu. There will be a great deal of lodged oats this season, the damp warm weather forcing a heavy growth of straw. Plant lice (green aphis) is said to be doing much damage to the crop in the vicinity of Springfield, Ill., and parts of Missouri. At Chicago oats were steady yesterday, except a slight decline in September futures. Quotations were as follows: No. 2. white, 30@31c; No. 3 white, 29½c; No. 2 mixed, 28⅜@29c per bu. In futures No. 2 mixed for June closed at 27½c, July at 27⅝c, and September at 26½c. The New York market is quoted firm for spot, but dull on futures, which are generally lower. Quotations were as follows: No. 2 white, 35@36c; mixed western, 31@34c; white western, 34@41c; No. 2 Chicago mixed, 34¼@34½c. In futures closing prices for No. 2 mixed were as follows: June, 33½c; July, 33⅝c, and August at 33c per bu.

DAIRY PRODUCTS.

BUTTER.

We cannot report any improvement in the demand for butter in this market, although there is a stronger tone and a slight advance in values at eastern points. Dairy ranges in price from 9@12c in this market, with the bulk of the receipts selling at 10@11c. Creamery is quiet and unchanged, with prices ranging from 12@14c per lb. At Chicago butter has improved to some extent during the week. The demand was checked a trifle by an advance, but holders of choice creameries are firm. Choice dairies are also firmly held, but are not quotabld higher. Quotations there were as follows: Elgin district, or fancy separator goods, 14½@15c; fine, 14@14½c; good to choice, 12@13c; good to fine dairies, 10@11c; medium to fair, 8@10c; packing stock, fresh, 5½@6c, old, 3½@4c. The New York market seems to be in better shape. Receipts are still heavy, but speculators are taking considerable quantities for cold storage, and exporters are buying more liberally. There has been an advance on all choice grades, and the market is quoted steady. Quotations in that market yesterday were as follows:

EASTERN STOCK.		
Creamery, State and Penn., extra		@16½
Creamery, State and Penn., seconds to firsts	13	@15½
State dairy, half-firkin tubs and pails extras		@15
State dairy, half-firkin tubs and pails firsts	13	@14
State dairy, half-firkin tubs and pails, seconds	11	@12
State dairy, Welsh, tubs, firsts	13	@14
State dairy, Welsh, tubs, seconds	11	@12
State dairy, tubs, thirds	9	@10
State dairy, tubs, fifths to fourths	7	@ 8
WESTERN STOCK.		
Creamery, Elgin, extra		@16½
Creamery, other Western, extras	15½	@16
Creamery, Western, firsts	14	@15
Creamery, Western, seconds	12	@13
Creamery, Western, thirds	10	@11
Creamery, Western, fourths	8	@ 9
Western imitation creamery, firsts	12	@13
Western imitation creamery, seconds	9	@10
Western imitation creamery thirds	6	@ 8
Western dairy, firsts	10½	@11
Western dairy, seconds	8	@ 9
Western dairy, thirds	6	@ 7
Western factory, extra		@10
Western factor, fressh, tubs, firsts	8½	@ 9½
Western factory, seconds	7	@ 8
Western dairy and factory, thirds	5½	@ 6
Western dairy and factory, fifths to fourths	4	@ 5
Old Western dairy or factory	4	@ 6

The exports of butter from New York since May 1st, the beginning of the trade year, compare as follows:

	Exports. lbs.
For week ending June 24	748,414
Same week 1889	241,027
Since May 1, 1889	3,418,551
Same time last year	1,814,495

CHEESE.

The market is in about the same position as a week ago, quiet and steady, with quotations on Michigan at 8@8½c for full creams. Other markets are also quiet. At Chicago trade is rather slow, stocks ample, and the feeling easy. Eastern markets were said to be heavily stocked and shippers were demanding concessions. Quotations there were as follows: Full cream cheddars, new, 7¼@7½c per lb; do twins, 7½@7¾c; Young Americas, 7¾@8c; 1-lb skims, cheddars, 6¾@7c; 1-lb skims, twins, 6¾@7c; hard skims, flats, 3½@5c. The New York market is very quiet and at a decline in values. Cables are lower, and foreign markets reported overstocked. Quotations yesterday were as follows:

NEW CHEESE.		
State factory, full cream, choice		@ 8½
State factory, choice, full cream, col'd.	8⅜	@ 8½
State factory, fine, full cream	8⅛	@ 8¼
State factory, good	7⅞	@ 8
State factory, fair	7½	@ 7¾
State factory, light skims, choice	6	@ 6½
State factory, skims, fine	6½	@ 6¾
State factory, skims good	5¾	@ 6
State factory, skims, medium	5½	@ 5⅝
State factory, full skims	3	@ 5
Ohio flats		@ 7

The exports of cheese from New York since May 1 (the beginning of the trade year) compare as follows:

	Exports. lbs.
For week ending June 24	2,494,664
Same week 1889	3,268,947
Since May 1, 1890	11,398,908
Same time last year	13,052,101

At Little Falls on Monday sales ranged from 7⅝8½c, the latter for dairy makes.

At Utica on Monday the sales footed up 16,553 boxes, against 19,593 same day last season. Prices ranged from 7¾@8½c.

At Montreal holders are asking 9c, but sales range from 8⅜@8½c.

Several thousand boxes of cheese went into cold storage in New York last week, and it is expected more will follow under present conditions of that market.

The Liverpool market yesterday was quoted dull, with light demand; quotations were 45s. 6d. per cwt. for finest colored and white new American, a decline of 2s. from the figures quoted a week ago.

WOOL.

The market continues dull and business is dragging both in local and eastern markets. There is a feeling of uncertainty in the trade which restricts purchases by manufacturers to the lowest possible limits. There is no doubt that manufacturers in the present position of affairs, are holding back just as much as possible so as to depress prices. The unexpected determination of many growers to get a fair price for their wool, and to hold it until they did, has been met by all kinds of schemes to lower values and weaken those who are holding their clips. Thus we see every trade journal yelling themselves hoarse to convince the growers that they are holding their wool too high; that manufacturers can do better by laying still, or purchasing foreign stock; that the McKinley bill will not be passed in time to do any good this season; that wool abroad is declining so that it can soon be brought into the country at a profit after paying full duty, etc., etc. There is some truth in these assertions, but it is considerably mixed up with what is not true. There is no doubt that manufacturers expect an advance in wool if the McKinley bill passes in its present shape, and that purchases made upon the present basis of values may be a fine thing later in the season.

We expected, when the season opened that there would be a wide variance of opinion between sellers and buyers, for the latter would naturally wish to make up for their losses of a year ago, and that a slow market would result. If the House will now push through that tariff bill we shall soon see a different tone in the wool trade.

The London wool sales which opened a few days ago, showed a decline in price as compared with the sales of April and May. Australian Merinos declined from 7½ to 10 per cent., scoured showing the greatest falling off. Cross breds were 5 per cent lower and Cape 10 per cent lower. Latest reports, however, say there is a large attendance of buyers, sharp competition, and the decline in values arrested, although the loss has not been regained. Buyers are represented as purchasing freely at current prices, and this may result in values advancing to their former level, although we hardly expect that.

The position of the eastern markets is very clearly set forth in the following extract from the N. Y. *Commercial Bulletin* of Wednesday last:

"As a rule actual consumers know that they are investing at a dead loss, and dealers feel that the weight of testimony is in favor of the idea that they would run a very serious risk by accumulating supplies at present cost, and want of confidence is the dominant feature upon the seaboard, Some of the trade, too, calculate that growers and thee neighborly friends, the interior speculatorsi have now worked valuation up to a level fully on a parity with anything they could consistently expect even though now enabled to avail themselves of the full benefit of increased duty, while at the same time the foreign production is steadily becoming cheaper and already at a point where but a trifle more shading would place a large portion of it as a formidable competitior with many lines of domestic wool. As yet the new wools are not accumulating upon this or neighboring markets, as most of the stock brought forward was on consumers' account.

The report of sales at interior points will be found interesting. They show a wide diversity in prices. A great deal of wool is being bunched and shipped. The Patrons of Industry of Ionia County will ship 80,000 lbs. in this way, and those of Oakland County are arranging to do the same thing. They appoint an agent and pay him one cent per pound for shipping, sacking, 30 days' insurance, and selling. The agent is to act under the instructions of a committee as to time of selling and price accepted,

Wool in the Interior.

At Jonesville, 25@28c buys wool.

At Adrian, quotations are 25@28c.

At Coldwater, quotations are 26@30c.

At Saline, the market is dull at 25@26c.

Market late and slow at Belleville, at 25@28c.

At Ovid, deliveries are slow, at from 24@27c.

At Lowell, 31c was the outside figure, usual range being 26@30c.

Quotations at Ionia are 25@27c for washed; 16@20c for unwashed.

At St. Johns, the range has been from 25@30c, with 27c an average.

Wool is slow at Dimondale, Eaton County. Farmers are holding off for 3oc.

Only a few thousand pounds have been bought at Portland at from 26@30c.

At Grand Rapids, quotations remain at 12@20c for unwashed; 22@28c for washed.

Slow market at South Lyon, with low prices. The best was 28c for choice.

Lansing Republican: Not much wool moving yet; 30c has been paid for a few clips.

At Hastings, receipts have been free at 25@30c. Above 40,000 lbs. were marketed on the 26th.

At Monroe, the market has about closed, with only 90,000 lbs. taken, at prices two or three cents lower than last year's.

Howell Republican: The wool market opens up this season very slowly so far, both buyers and sellers are cautious. The prices paid range from 25@30c.

At Caro, prices of wool have ranged for unwashed from 16@25c, and for washed from 25@30c, though one or two extra fine lots have gone a little above the 30c limit.

The Flint Globe says indications are that the present will be the "big week" in the wool business. Prices for washed wools ranged from 26@33c, one or two lots of medium wools going as high as 31½c. Wednesday was the high day, but prices went down to 28c for best.

Owosso Press: Advices to local buyers on Wednesday were not favorable, and it is doubtful if the prices of last week will be sustained. In some localities buyers have withdrawn from the market, claiming that local buyers have forced the market above a line at which there is any safety in operating.

The Lapeer Democrat says wool creeps into market very slowly this year, the farmers exhibiting a tendency toward shyness, and are holding on, apparently in no hurry to sell. Not more than one-quarter of the amount has been marketed this year in comparison with former years at this time. Prices still range from 25 to 30c.

The Port Huron Times says: The market has been lively for the past week and competition between the buyers is sharp. The latter fact has caused more wool to come into this market and better prices to be paid than anywhere else in the State. About 40,000 lbs. of wool have been purchased here since Monday, June 16, at prices ranging from 14@33½c. The average price paid for unwashed has been about 18@20c, and for washed about 29c. As compared with a year ago the market is in much better condition to-day, higher prices being paid and dealers more anxious to buy. About 30,000 pounds were taken in last week.

SILVER IN CONGRESS.

On Tuesday last the silver bill, as amended by the Senate, was reported to the House, and a vote taken upon it. The result was a defeat for the bill in its present shape, the majority of the house standing by the original bill. Conference committees will now be appointed by the Senate and House, and an attempt made to get the majority of those two bodies in accord. The ideas of those who voted against the free coinage amendment of the Senate may be summarized as follows: The difference between the value of the silver bullion and the standard dollar would go to individual owners of the bullion instead of the government as at present. Free coinage would draw all the silver from other countries and dump it into the United States, to the profit of foreigners and the loss of the people of this country. The majority of the House took the ground that the House bill, which compels the purchase of 4,500,000 oz. of silver per month would absorb the entire silver product of the country and add that much to its currency. That the profits resulting from the coinage of bullion would go to the government and not to the individual owners of bullion, and would not therefore attract foreign silver to this country. These are the points which exercised the strongest influence in determining the action of the majority, and our readers can determine for themselves the correctness of the conclusions arrived at.

The N. Y. *Commercial Bulletin*, which bitterly opposes all silver legislation, and is also a strong free trade journal, publishes the following upon the situation:

"It looks very much as though practical free coinage, but under a less alarming name, would become the policy of the country by vote of Congress. The purchase by the Government of 4,500,000 ounces of silver per months ought to satisfy the most aggressive free coinage man if the moderate figures of silver production prepared at the Treasury Department are correct. To give to the certificates based upon this silver the legal tender quality first given to the Treasury notes in the emergency of the nation's peril, to extend this quality to notes of a different character already issued, and to provide for the coinage of the silver bullion to meet actual necessities, is about as close an approach to free coinage as one could well come without adopting the name, About the only advantages of this proposed programme of the Republican majority are that it places a limit upon the purchases, although a high limit, and enables members from conservative districts to say to their constituents that they voted for something else than free coinage.

"The progress of the silver agitation in Washington has been in but one direction. The West has been aggressive and persistent, the East has stood on the defensive with half-hearted timidity. When Secretary Windom proposed his scheme of note issues representing a dollar's worth of silver bullion, it was considered by the more conservative members here a dangerous step in the direction of silver inflation. But with every caucus and every vote in Congress the East has retired further and further from that position, until to-day the proposition of the Secretary seems safe and conservative in comparison with what is to be enacted."

A SPECIES of aphis, known as the Texas louse, is said to have ruined the oat fields for a hundred miles in circumference around St. Louis, Mo. It appears to work like the aphis or plant lice did in the wheat crop of this State last season, sucking the sap from the plant and destroying its vitality.

PERTINENT QUESTIONS ABOUT THE PRICE OF WOOL.

To the Editor of the Michigan Farmer.

I ask for a little space in your paper on free and protected wool. In 1850 I bought my first sheep in Michigan. From 1854 to 1860 I got from 40 to 46 cents for my wool. I want you to answer the following questions for the benefit of many readers: Why was it that from 1861, taking the gold dollar for a basis, that it never has been so high since? And why, or what, was the reason that right away after the war tariff on the decline of the price of wool that the farmers sold off, some whole flocks, and some half, in Michigan and Ohio? E. H. SCOTT.

SEYMOUR LAKE, June 18, 1890.

The statement of his question by our correspondent is not in accordance with facts, and so we will have to explain a little before attempting an answer. The tariff of 1861 was not a "war tariff." It was passed and signed by President Buchanan before the war had begun, and was in no sense a war measure. It was passed as the only available remedy for a bankrupt treasury. There was no money to pay even the President's salary, and United States bonds were selling at 12 per cent discount. To get money to carry on the government the Morrill tariff bill was passed, called so because Lot M. Morrill, of Vermont, was chairman of the committee which formulated and reported it to the House. There never was a "war tariff" on wool, because that tariff was levied before the war began, and was not changed until 1867, two years after the war was over. As to why prices were higher before the tariff was levied than afterwards it is perfectly clear to any one that it was because of the increased supply of wool. In 1861 not a pound of wool was coming to this country from Australia, where the industry had just begun to assume a position of importance. The heavy demands for wool made by this country to clothe its two millions of soldiers, induced wool-growers everywhere to extend their business as rapidly as possible. Hence the United States, South America and Australia exhibited a wonderful growth of the industry in that period. Suddenly in 1865 the war ended. The United States government was no longer in the market for woolens. Not only that, but an immense amount of army clothing was thrown upon the market and sold at whatever price was offered. The effect was to depress the woolen goods market very severely, and thus cut off the demand for wool. At the same time Australia was each year sending out increased amounts of wool and at prices which, even after paying the then duty, American wool-growers could not compete with. This competition had become so strong in 1867, that in deference to the demands of the wool-growers Congress passed the tariff bill of that year. Before its passage importers and manufacturers, realizing that wool was likely to go higher under its influence, laid in heavy stocks, and thus avoided paying higher prices for a time. Business generally was suffering a reaction from the unnatural activity of the war period, and values of everything were declining. Wool suffered with everything else. It was declining abroad also, and as prices lowered here values declined in the markets of the world to a point at which it could be imported after paying duty. Thus wool declined in London just the amount of the duty lower than in Boston, and it is very certain it would have reached a level with foreign markets had there been no duty to prevent its importation at the London price. It was during this period that farmers slaughtered their flocks, very unwisely we think, just as they did in '85, '86 and '87.

It must be remembered in looking at the difference in the price of wool in 1850 and 1890 that an entirely new element has had a very strong influence in lowering prices—foreign competition. In the nature of things domestic competition can always be relied upon, in an article of general production, to keep prices down to a point where only a fair profit is left to the producer, and that wool would finally reach that point is certain. Therefore as the wool bearing properties of sheep increased, and they would return a profit to the flock-master at a lower price per pound for wool, so long would wool-growing be extended. Thus in 1850 you probably got two or two and a half pounds per head from your flock. Take the latter, and it was a high average then, and see how you stood compared with the present time. Two and a half pounds at the highest price you then received—46 cents—would be $1.15 per head. If you have a good flock now—as good in proportion as a flock averaging two and a half pounds was in 1850—you should get eight pounds per head. At 28 cents per lb. that would be $2.24 per head.

To show you the competition you have to meet now, look at the following figures which we take from a U. S. Consular report published last October. In 1871 the number of sheep in Australia and New Zealand was 49,774,534 head; in 1881 they had increased to 78,063,426 head; in 1888 to 96,487,811 head. In South America the flocks are now estimated at 105,000,000 head. You did not have these to compete against in 1860, or previous to that time, any more than American wheat-growers had the wheat fields of India. And you can rest assured that your wool is worth just the amount of the duty upon it more than it would be if selling in free competition with the clips of those countries. While the price has fallen in the United States since 1850, it has not fallen to such an extent as it has in countries where there are no protective duties levied upon it.

THE United States officials have finally arrested L. D. Staples, of Portland, Ionia Co., formerly of West Sebewa, for using the mails to defraud people. We have repeatedly warned our readers against this man, and yet he has been enabled to find dupes among a class of people who ought to be well informed, Some agricultural papers very foolishly published his advertisements of plants, and thus aided him in securing orders,

IT is now a certainty that the apple crop is a failure in Michigan this season. The information comes from such widely separated sections that the failure must be general. The peach crop is likely to be light, and in some sections it will be a comparative failure. Stawberries, taking the State as whole, are about two-thirds of an average crop, the failure most general in the eastern counties. Raspberries have done better, and a fair crop will be picked.

IN spite of the strong opposition of the press of the country, the infamous lottery bill passed the Louisana House of Representatives by a vote of 66 to 29. The Senate will amend it by making the annual license $1,150,000 instead of $1,000,000 and the House is then expected to pass the bill as amended. This is simply a bill to allow a lottery company the privilege of swindling the people of the United States under the cover of law. That subsidy will have to be collected from the dupes of the lottery company, as well as the prizes paid and the enormous profits of the concern. The press of this city unanimously condemned the proposed bill with the exception of two weeklies who are "in the business." The *Tribune* was very fierce in its denunciations, probably because it was a southern swindle. Yet for 20 years it has given aid and comfort to a lottery conducted by a newspaper concern. It has rented it a building, printed its paper and thus tacitly endorsed a scheme which is just as much of a swindle as the Louisiana lottery. Does the few dollars paid by the concern blind the eyes of the managers of the *Tribune* to the illegality and dishonesty of this lottery? If so, how can it consistently condemn the Louisiana legislature for allowing itself to be bought over to the support of the Louisiana scheme? Have they not the same right to make money by aiding a notorious swindle as the *Tribune* has?

THE New York Court of Appeals has affirmed the decision of the lower courts in the North River Refinery case. This was a case brought against the Sugar Trust, and the decision of the lower courts was adverse to the Trust on every point. The decision takes the ground that the State seeks to protect individuals rather than combinations. It also says: "The defendant corporation (in joining the Sugar Trust) has violated its charter and failed in the performance of its corporate duties, and that in respects so material and important as to justify a judgment of dissolution. We are enabled to decide that in this State there can be no partnerships of separate and independent corporations, whether directly or indirectly through a medium of a trust; no substantial consolidations which avoid and disregard the statutory provisions and restraints, but that manufacturing corporations must be and remain several as they were created, or one under the statute." The "Trust" people are reported to be about changing their headquarters to New Jersey to escape the result of the New York decisions.

A CABLE dispatch says that a deputation from Scotland visited Mr. Chaplain, Minister of Agriculture, not long ago and asked him to modify the restriction against the importation of American cattle. The chief argument of the deputation in support of their request was the scarcity of store cattle in Great Britain and the absence of pleuropneumonia in America. In reply to the request Mr. Chaplain said that the bulk of the farmers of Great Britain favored restriction. He was unable, he declared, to hold out the slightest hope of any modification of the present regulations governing the importation of cattle, even if cattle in America were entirely free from the disease. Here is your English free trader in his true colors. He wants free trade when it pays, and "restriction" when that pays better.

The Buffalo *Farmers' Journal* thus refers to the Detroit Exposition:

"Detroit will hold an international fair and exposition between August 26 and September 5 this year, which is intended to be continental in its scope. Last year the people of the City of the Straits held a fair which was as large a success as that of Buffalo was a failure. It was conducted on a broad guage plan, by enterprising men who were above resorting to catchpenny "stand-and-deliver" tricks such as disgusted the public here, and the result was what naturally might be expected. We expect that the exposition of this year will be even more of a success than that of 1889."

Stock Notes.

MR. A. A. WOOD, of Saline, is picking up a lot of rams for his western trade. Any of our readers who have a bunch on hand can drop him a postal card, and he will drop around and see them.

THE following, which we take from the Coldwater *Republican*, shows that Michigan Berkshires are getting a reputation among the breeders of the land, and command top prices:

"A few days ago A. W. Cooley sold to M. K. Prine & Son, of Oskaloosa, Iowa, a yearling Berkshire boar for $200 cash. This boar is a very fine animal, and he will be on exhibition at all of the large fairs in the west next fall. M. K. Prine & Son have bred Berkshire hogs for over twenty years, and they know what a good hog is when they see one."

Mr. Cooley has been a very successful exhibitor at Michigan fairs, and last season made a great record at the State Fair.

L. W. & O. BARNES, of Byron, Shiawassee Co., proprietors of the Lakeview herd of Poland-Chinas, report the following recent sales of stock:

To Charles Parker, Laingsburg, two young sows.

To A. Delbert A. Fay, Cohoctah, one young sow.

To Wm. H. McDowell, Bad Axe, one young boar.

To P. S. Barnum, Byron, boar and two sows.

To C. Clark, Grand Blanc, one young boar.

To Charles Fishbeck, Howell, boar and two sows.

To Hardwood Bros., Crystal Valley, boar and three sows.

The Messrs. Barnes write: "We are raising 112 fine spring pigs, from 17 sows, sired by five different boars, bred in Michigan, Ohio and Indiana. Had good luck with lambs and are raising some good ones. Stock all doing well at present."

A twenty-five cent piece of ice melting on the front doorstep has by accurate measurement run a stream of water two inches wide and four feet long before drying up.

WEST MICHIGAN FARMERS.

At the last meeting of the West Michigan Farmers' Club, held at Grand Rapids on the 10th, the cultivation of the corn and hay crops was considered. From the report in the *Grand Rapids Democrat* we take the following account of what was said:

Robert Briggs—What corn I ever raised was always in the good, old fashioned way, with a one horse cultivator. I don't think that anything was ever made by late cultivation, say when the corn was in the tassel. My corn now stands over eight inches high and has been gone over three times. Now in potatoes I am not much of a success as a grower. I use one pound of Paris green to three hundred pounds of plaster and find it potent.

W. W. Johnson—I think the best method of cultivating corn is to get on as soon as we can. Once over the field with the cultivator and I call my summer work half done. I agree with Mr. Briggs in what he says about late cultivation, it hurts the corn. The old adage says, "Make hay while the sun shines." Two or three hours after the grass has been cut I would put it in the cock. Three or four days after I would take the top off, where there was the most sweat, and hurry the rest into the barn, it will not sweat much. From the cocking up process I believe that the hay loses one-half of its nourishment. I would cure all kinds of hay in that way.

Robt. Briggs—I believe that hay made in the cock will weigh twice as much as that made in the sun.

Elder Johnson said that clover hay rained on in the cock would not be hurt if allowed to stand.

W. W. Johnson—I wonder if land that is left to hay is not the most expensive crop we can raise? I can raise three or four times as much of any other crop on a piece of land than I can hay.

J. Best—In putting hay in the cock, I should like to know which the club think the better way, to roll it or pitch it up. I always pitch it up. (Several voices, "That is the proper way.") After the first time I run the cultivator through the corn, I hoe it, that keeps the weeds out and helps its growth.

W. W. Johnson—No one seems to be anxious to talk, Mr. President, and I am going to talk again. At the Sweet farm the other day I saw a man planting sweet corn and only using five kernels to the foot. I know that it is said the less kernels the sweeter the crop, but I'll venture to say that it is just as sweet when fifteen or twenty kernels are put in to the foot.

Geo. Edison—If I was putting up a little for special use I favor the plan of Mr. Briggs, but with forty or fifty acres to put up it is different. I cut it when dry, put in the tedder and keep it flying in the air until dry.

S. M. Pearsall—That suits me. Mr. Briggs and I agree on the hay question. I want all the hay I can feed. Corn should be so planted that you can use the horse cultivator.

Geo. Edison—When hay has been rained upon, I have found that the best way to do is to get out and shake the hay out, let the air through it and put it in the barn. Your crop will not be hurt very much.

E. Graham—I believe, Mr. President, that the hay crop is the best crop that a farmer can raise in Kent County. A good meadow properly taken care of will yield 2½ to three tons of hay to the acre, which will sell at $10 a ton. Wheat, oats and corn will not pay that much.

R. Briggs—I believe that the best time to cultivate corn is after the sun has passed the meridian.

S. M. Pearsall—I should like to have that submitted to the Club and have a vote taken on that point.

President Linderman—In a dry time the top of the ground is baked, take your cultivator out and you turn up moist ground on top and the dry ground down. You have so much more dry ground around your corn. If you can keep your bottom ground wet and the top dry, your corn will flourish.

Mr. Stewart—Mr. President, do I understand that there is but one method of cultivation? What are you doing when you harrow?

President Linderman—When the ground is very dry I think that it is injurious to cultivate.

E. Graham—Keep the ground pulverized until a drought comes, then stop.

This question of cultivation or non-cultivation of corn during a dry time called forth many spirited arguments. On call from S. M. Pearsall the following question was put to the Club for vote: Is it a benefit to the crop to cultivate mellow ground during very dry weather? Yeas 10, nays 3.

The topic for July will be "What Shall We Grow in the Future on our Farms to Compete with the West."

WE have recieved the eleventh annual report of the Secretary of State on farms and farm products for 1888-89, and find it a very interesting document.

NEWS SUMMARY.

Michigan.

Saginaw is to have another bank, with a capital of $150,000.

More talk of connecting Ann Arbor and Ypsilanti by an electric railroad.

The cider and vinegar factory at Hastings burned on the evening of the 15th.

Guests at an Ionia hotel ate home-grown celery of the new crop last Sunday.

There are in Michigan two women who draw pensions as widows of revolutionary soldiers.

A Michigan boy, Arthur W. Colton, of Wayne, was chosen to deliver the class poem at Yale University.

R. A. Ward, of Hillsdale, the champion half-mile runner of the United States, died very suddenly on the 18th.

The furniture factories of Grand Rapids use from thirty to forty millions of feet of dry oak lumber annually.

Eleven hundred dollars have been subscribed by farmers in the vicinity of Marlette who want a cheese factory.

Frank McBurne is in durance at St. Johns for driving six head of cattle from Clarence Brugher's pasture to Ovid and selling them.

Corn in Tuscola County is damaged by too much rain and cold weather, and by the wire and cut-worms which are finishing up the job.

The University of Michigan has held 46 commencements, and graduated over 10,000 students. There were 545 graduates this year.

The mortgage records of Livingston County show that a large majority of the mortgages in that county are owned and held by the farmers.

A sanitary convention was held at Battle Creek this week, one of a series to be held under the auspices of the State Board of Health.

Parma's high-school graduating class numbered 13 this year, and the members called themselves "The Grangers," all being the children of farmers.

By the breaking away of the flume which protects the Bardeen paper mill at Otsego on Wednesday, the mill was damaged to the extent of about $18,000.

The boiler of Gardiner's stave mill at North Star, three miles from Ashley, exploded on the 25th, killing four men and injuring fourteen, two of whom have since died.

Albert Spring, farmer, living near Melvin, while crossing the railroad track which divides his farm, slipped down an embankment, was struck by the engine of a passing train and instantly killed.

Adrian Press: On June 20 Oscar Wilbur peeled the bark from his apple trees, claiming that new bark will form if the old be taken off on that day. We would not care to try the experiment.

Calvin Bliss, of Ann Arbor, who established himself in the University city in 1834, when he was the only jeweler west of Detroit, has relinquished his business to his son, after 56 years in the trade.

A class of 114 graduates, the largest in its history, received diplomas on Commencement Day at the Normal School at Ypsilanti this week. "Normal halls" the past year were filled with 1,175 pupils.

The first victim of over-indulgence in ice-water in this city this year was Anthony Varbon, who had been in the country but three weeks, and was not aware of the deadly nature of this American luxury.

This was commencement week at the University, the Normal and most of the colleges and seminaries located in this State. The fact accounts for the heat, humidity, and gaseous temperature of the weather.

Jonathan Dean, of Charlotte, veteran of the war of 1812, whose pension bill for services then rendered has been dragging its slow length through Congress, is dead, and beyond the tardy recognition of his country.

The michievous friends of a Lowell girl who was going on a visit, escorted by her brother, palmed the pair off as a newly-wedded couple, showering them with rice, old shoes, and other articles popularly supposed to bring good luck.

Mason Democrat: Last fall Wm. Couch, of Aurelius township, harvested over 700 bushels of wheat from 30 acres of land, an average of over 25 bushels to the acre. He recently sold the bulk of the crop to Densmore & Co., for 86 cents per bushel. It weighed 62 lbs. to the bushel.

James Holton, a farmer of Sandstone township, Jackson Co., had a dispute with a constable over a $19 judgment which the latter had obtained against him, and Holton fired three shots at the officer. Luckily for both, he proved a poor marksman and no harm was done.

J. M. Case, prominent citizen of Marquette, and identified with Upper Peninsula mining interests, is dead. His death occurred in England, whither he had gone to conclude the sale of the noted verde-antique marble quarries in Marquette Co. He was formerly a resident of Lansing, where he was widely known, and where his father still lives. He was educated at Olivet and Ann Arbor, and was a cousin of Hon. J. M. Turner.

The Portland Observer says L. B. Staples, of Woodland, has been arrested by the U. S. Marshal for the western district of Michigan, charged with using the mails for fraudulent purposes. The arrest is made upon complaint of scores of people who claim to have sent Staples sums varying in amount from one to ten dollars for wheat, blueberries, etc., for which nothing was ever received by them and no information given why this was so. Staples has been bound over to a hearing before the grand jury next October.

A deliberate attempt at train wrecking was made near Grand Rapids on the night of the 24th. Two young boys saw two men carrying a heavy piece of timber to the track of the D., G. H. & M. road near the city just before the evening express west was due. The engine and baggage car were derailed. Herbert Nesser, of this city, was caught under the tender as it tipped over, and he died in five minutes after the accident. There were forty passengers in the coaches, who realize they had a narrow escape. No punishment is too severe for the dastards who planned this crime.

General.

It is said a revolution is impending in Mexico, the movement being widespread.

Indications are that the census now being taken will give Chicago a population of over a million.

Lee F. Wilson, a member of the Indiana Legislature, has been found guilty of procuring false affidavits in pens on claims and fined $500.

A bill has been introduced into the Senate to incorporate "The Women's National University and School of Arts," to be located at Washington.

The sales of malt liquors for the year ending April 30, 1890, in the United States were 26,820,953, an increase of 1,722,188 barrels over the previous year.

No use, the sugar trust must die. The New York court of appeals has rendered a decision sustaining the judgment of the lower court dissolving it.

Nine Indians were graduated from the government Indian school, Baskell Institute, at Lawrence, Ks., on the 29th. The Indians belonged to various tribes.

Four hundred glass-blowers walked out of a Pennsylvania glass factory because one non-union man was given work to keep his family from the poorhouse.

Brazil's new constitution is modeled upon that of the United States. The president is elected for six years and ineligible to re-election for the next ten years after his term expires.

Five deaths from sunstroke are reported as having occurred at Chicago on the 26th, with 20 others prostrated by the excessive heat, the temperature ranging from 90 to 98 degs. in the shade the entire day.

There are fears entertained that the President will veto the river and harbor appropriation bill, which disposes of a round $25,000,000; and its friends may pare it down to $21,000,000, which sum they think would get through.

The first meeting of the commission of the world's fair was held at Chicago on the 26th. There are 106 members, of whom all but ten were present. There is a movement looking toward the election of Hon. T. W. Palmer, of this State, as president.

Despatches from San Salvador state that President Menendez died suddenly on the night of the 22nd, just after the conclusion of a banquet celebrating the fifth anniversary of the defeat of the Zaldivar faction. A panic ensued during which several army officials were killed.

Baby Francis M. Whaley, two years old, an orphan and heir to half a million and over, has an allowance of $2,800 annually for expenses. His aunt and guardian, Mrs. Chisholm, of New York, says this is not enough, and wants the sum increased to $5,000.

The Mayor of Philadelphia realizes how hard it is to suit everybody. A member of the Society for the Prevention of Cruelty to Animals has made complaint that the streets are kept so clean there isn't dirt enough on the cobble stones to give the horses a secure foothold.

A pair of English sparrows recently stopped the Sarnia, Ont., town clock. The movement of the hands interfered with a site they wanted for a nest, and they proceeded to wind the shaft on which the hands are pivoted with grass and cord. This failing, they bound the hands together by twisting them with twine and straw.

About $500,000 worth of mail matter—checks, postal orders, money, etc., has been lost in transit between Council Bluffs and Davenport, Ia., within the past nine months. Two railroad employes have been arrested, and a pouch containing $250,000 worth of checks and drafts found in a vacant house at Wyandotte Junction, where mail is transferred.

At New Haven, Conn., on the 26th, Lucian W. Speery, ex-mayor and ex-State Senator, shot himself owing to financial troubles. He had been appointed trustee of an estate of $16,000, and it was time for settlement. He could account for only $6,000 of the amount, and was practically an embezzler and would have been arrested had he not shot himself. Besides this he was under at least $50,000 criminal indebtedness, without a dollar to clear himself with.

The rescuing party has not yet reached the imprisoned men in the mine at Dunbar, Pa., and hope has give way to despair. The men have been without food and water so long there is almost no chance of finding any of them alive, even if they have escaped the poisonous gases of the mine. The work of rescue has proceeded as fast as it could possibly be pushed, but greater difficulties than expected were encountered. Signals from the victims ceased several days ago.

The Illinois Central railroad is tied up by a strike and about 1,600 men are idle. It is expected other lines will also be tied up and Chicago's carrying trade suspended for a time. Live stock is reaching the city by roundabout routes over connecting lines. Two hundred thousand dollars' worth of perishable freight is side-tracked at Kankakee, 60 miles from the city, while at intermediate points quantities of fruits, berries, melons, etc., are rotting. The shippers are wild, and fruit men tearing their hair.

An 18-year-old lad named Perry Donaldson, thrust the muzzle of a revolver in the face of Jacob Atkinson, paymaster of the coke company, at the mine six miles from Uniontown, Pa., and ordered "Hands up!" Atkinson was counting out money and placing it in envelopes preparatory to paying the men, fifty of whom were within call but out of sight. The cashier obeyed the order—men are apt to obey when a command is reinforced by a look into the business end of a pistol, and the young thief gathered up $1,160 and escaped to the mountains with it.

Mrs. Susan Merrifield, of Americus, Ga., was telling her husband of some small domestic occurrence, when he, being surly and inclined to silence, bade her shut her mouth, as the sound of her voice was hateful to him. She obeyed him, exactly, and from that day, some thirty years ago, till her death the other day, he never heard her voice in speech. She never spoke again, communicating with her children by signs and writing. Not even when her husband lay dying and besought her to speak to him, did she do so, but it is believed that it was not obstinacy but that long disuse of the organs of speech had rendered her unable to do so.

Foreign.

Cholera in Spain is abating.

Sara Bernhardt, the famous actress, took an overdose of chloral on Monday, to relieve insomnia and came near dying. This is the latest freak of the eccentric Sara.

Fort de France, capital of Martinique, in the French West Indies, was a town of 14,000 inhabitants. Half of it is now in ashes, and 5,000 people are homeless.

It is alleged the American beef sent to Mayence, Germany, is not relished by the people who complain it is too fat, too lean, too tough, too dark colored, too anything to raise a kick over.

Poetry.

THE SEA.

Dawn is dim on the dark, soft water,
Soft and passionate, dark and sweet;
Love's own self was the deep sea's daughter,
Fair and flawless from face to feet;
Hailed of all when the world was golden,
Loved of lovers whose names beholden
Thrill men's eyes as with light of olden
Days more glad than their flight was fleet.

So they sang; but for men that love her,
Souls that hear not her word in vain,
Earth beside her and heaven above her
Seem but shadows that wax and wane.
Softer than sleep's are the sea's caresses,
Kinder than love's, that betrays and blesses,
Blither than spring's when her flowerful tresses
Shake forth sunlight with shine and rain.

All the strength of the waves that perish
Swells beneath me and laughs and sighs;
Sighs for love of the life they cherish,
Laughs to know that it lives and dies;
Dies for joy of its life and lives,
Thrilled with joy that its brief death gives,
Death whose laugh or whose breath forgives
Changes that bids it subside and rise.

—*Swinburne.*

THE ARMY OVERCOAT.

He was idle as a boy, he was shiftless as a youth,
He was slovenly in dress, and his manners were uncouth;
The neighbors looked their scorn when they saw him passing by;
His father used to scold, and his mother used to sigh;
But he volunteered the day he was old enough to vote,
And they hardly knew the fellow in his army overcoat.

For he braced his lazy shoulders with a military air,
His aimless face grew firmer; said the neighbors, "I declare!"
His father took his hand, his mother beamed her pride,
The winter day he marched away a foolish maiden cried;
Full fifty folks forgot their sneers, full fifty roughly smote
With friendly slap the back that bore his army overcoat.

He sent his parents letters they were long in making out;
He was faithful as a sentry, in the fight his heart was stout;
The day he saved the Captain's life, that day he lost his own,
And spoke some manly parting words, and died without a groan.
The Captain closed his eyelids with a choking in his throat,
And sent him to his mother in his army overcoat.

The meeting house was crowded full upon his burial day,
And scores and scores passed down the aisle to see him as he lay,
The foolish maiden noticed on his hand a ring of bone,
The Union shield cut on it, and wished it was her own;
And after prayer and hymn and speech, the war-time anecdote,
The earth received the soldier and his army overcoat.

And now when Decoration Day comes round, a flag they put
Above his head, and deck his grave with flowers from head to foot;
And here his worn old father and his mother bowed with years,
Stand sadly by and listen to the chaplain's voice with tears;
And an ancient foolish maiden sees before her memory float
The vision of a soldier in his army overcoat.

Miscellaneous.

RUNNING A REBEL PICKET.

BY CARLETON.

It was in 1862. For weeks the seventh Division of the "Army of the Ohio" had been to all intents and purposes shut up in Cumberland Gap. Its commander, General George W. Morgan, an old veteran of the Mexican War, had urged, and that repeatedly, upon General Buell, our department commander, the necessity of immediate relief. His importunities were disregarded, and finally, as a last resort, an appeal was made to the War Department at Washington, but with no better success. Indeed, it seemed as though we were to be offered up as a sacrifice to the heedlessness, carelessness or incompetency of somebody who might relieve us if so disposed. Briefly, the situation was this: General Braxton Bragg, in command of a confederate force far outnumbering our own, had crossed Powell's River in our front, and now lay scarcely three miles to the south of our position. He also held the Virginia road and that leading down Powell's River Valley, so that we were effectually blockaded from all that part of Tennessee lying to the south of the Cumberland range. So far as forage was concerned, however, it made little difference, as we had pretty effectually stripped the adjacent country before its occupation by Bragg and his army.

Previous to making a close investment on our front, Bragg had sent Kirby Smith to gain our rear, which he accomplished by passing through Rogers's Gap, some twenty miles below, with another force much superior in numbers to our own, a part of which was a strong and efficient body of cavalry in (in which arm we were sadly deficient), and, after capturing our supply trains which were en route from Lexington, and defeating Nelson at Richmond, Ky., he had established his headquarters at Barboursville and pushed his advance forward to Flat Rock, so that now we might look to see his legions cross "Third Log Mountain," a few miles in our rear, at any moment. Our situation was a critical one, and meant a prompt retreat, or starvation and finally surrender. Even now starvation was staring us in the face. The bulk of our rations consisted of neither more nor less than half-ripe corn gathered from a neighboring field, in which the enemy also did no little foraging; and many were the sharp conflicts which took place in that field over a few ears of corn, and many a poor fellow fell there fighting for his rations.

I used to wonder why the occupancy of Cumberland Gap as a military post had been permitted. There must have been a vast amount of ignorance regarding that locality lying around loose somewhere. As a strategic point it was a failure; as a single defensive position it was a Gibraltar; but to make of it a point d'appui, while at the same time there were numerous other gaps both above and below, which were passable to an army with all its equipage, or easily made so, was the supremest folly; and our condition at the time of which I write was a fair demonstration of it. When General Sherman said that to defend Kentucky he should need 100,000 men, he was laughed at and called "Crazy Sherman." He was right, nevertheless; and this same Cumberland Gap campaign proved it. The truth is, that the Government was fairly bulldozed into occupying this position by the representations of Andrew Johnson, Parson Brownlow, Horace Maynard and other prominent Tennesseeans, who persistently asserted that if Cumberland Gap were once in our possession thousands of East Tennesseeans and North Carolinians would flock to our standard, and that it would become a grand rallying-place for all the oppressed people of those sections. Well, it was captured by us, and so fortified that, had it been provisioned for so long a siege, the old Seventh Division could have held it until to-day, in spite of all that the forces of Braxton Bragg or Kirby Smith could have done; but notwithstanding all that was done, and all the vast expense to which the Government must have been by reason of its occupation, the thousands who were to rally here failed to materialize; and the campaign proved to be a stupendous failure. "Some one had blundered."

Under the circumstances, there was only one thing to do, and that was to step down and out—and we did it. We didn't do it a bit too soon, either. We did not wait to cook three days' rations, for we had none to cook. If a soldier had a few handfuls of corn in his haversack he was well provided. We went out in light marching order, without a pound of superfluous baggage. Guns and arms of every description, except those we carried, were either wholly destroyed or rendered useless. All our baggage, camp and garrison equipage was burned, our tents excepted, and they were slit from top to bottom and left standing. Tons of ammunition and blasting powder were destroyed, and just as the Rebel advance showed over the ridge toward Powell's River we left in the opposite direction for the Ohio River, distant some 200 and odd miles. Our route lay through the mountain region of Eastern Kentucky—the rebel nursery of the State, where more family feuds had been hatched and vendettas born and nursed into full-fledged murder and bloodshed than in any other place on this continent. A majority of these people were, of course, ill-disposed toward us, and as we were of necessity forced to live off the country, it may be readily inferred that our march was not a holiday one, nor one to be accomplished without many hardships; especially as hundreds of our men were barefoot, hundreds without coats or blankets, and the entire lot of us, from General Morgan down, decidedly seedy. It must not be supposed that General Braxton Bragg had any idea of letting us slip from his grasp so easily or pass beyond his reach entirely unmolested. A heavy body of Rebel cavalry hung on our flank and rear, and now and then they came so close to our business end that they got stung; while another large body of Confederate cavaliers under the command of General Humphrey Marshall threatened our front, felled trees across our road wherever practicable, burned a few bridges, and rendered themselves as disagreeable as possible. The bridge burning was of no especial detriment to us, because the season was so dry that it was at times very difficult to get water for the men to drink, and there was much suffering in consequence, so that to ford a stream once in a while was a god-send.

I did not start in to write a history of this campaign, nor am I going to do anything of the kind; but I heartily wish that somebody would do it, and try and do the old Seventh Division justice, and especially our General, for he has never had half the praise he deserved for the skilful manner in which he conducted that retreat. To my mind it was as much to his credit as though he had won a battle. A life saved is better than a victory won, and the superb skill with which General Morgan conducted that retreat from Cumberland Gap to Greenupsburg to the Ohio River, saved scores of lives. It should have won another star for him, but it didn't. No matter. In the hearts of the veterans who participated in that long march the old general has a greater honor; there he is crowned.

We had reached Grayson, the county seat of Carter County, a straggling village of a few hundred inhabitants it may be, and distant about fifty miles from the Ohio River. It was late in the afternoon when we bivouacked in a large meadow just mown—the hay raked into wind-rows. It was a bonanza for man and beast. It meant good beds for the men and full rations for the horses, and they enjoyed them, too. Besides, we were nearing the end of our long and tedious march, and we felt elated in proportion. The hardest part of it was over, and at the end, a long rest, full rations, new clothing and plenty of greenbacks. Up to this point the Rebel cavalry had hung persistently upon our front, flank and rear, watching for a chance to strike, but it had been foiled in every attempt. We had come to the conclusion that they were not likely to venture much nearer the Ohio than they were now; nor was it likely that they would suffer us to pass quietly out of their reach without making a strong effort to cripple us, and turn our hitherto dignified retreat into a stampede—a regular Bull Run rush for the river. We knew that they had been largely reinforced, and consequently extra precautions were taken against a night attack. We also knew that there was a heavy cavalry force in our advance, but just where they were we did not know. As I have before intimated, we were sadly deficient in cavalry, and the country on either flank and in our front was not so thoroughly scouted as it should have been, and consequently General Morgan lacked that full information of the enemy's movements which he should have had. He knew, however, that there was a heavy cavalry picket of the enemy at a cross-roads about five miles in advance, and on our direct line of march. Hitherto as far as practicable, the several brigades composing the Seventh Division had marched on parallel roads, especially when near enough to be within easy call, ready to resist an attack from whatever direction it might come.

General Morgan was desirous of having steamers meet us at Greenupsburg to transport the entire division to Cincinnati; but how to get word to General Wright, who was in command there, was the question. Manifestly, a messenger must be found who would go to Greenupsburg and telegraph the message. The enemy was between us and that point, and the chances were that he who went ignorantly blundering around the country in the night, as he must do, stood a first-class chance of either being captured or shot; perhaps both. No one appreciated the situation more fully than did Genera Morgan himself. He knew the danger, andI hence he hesitated to order an officer to go—and an officer he must be—but anxiously waited for some one to volunteer. No one seemed inclined to take the risk. Finally one of his staff offered himself, but the General said, "No I may need all my staff to-morrow, and besides you would be captured before you were five miles away. You do not understand such matters." The young man was brave enough, and would have gladly accepted the responsibility, but the General would not hear of it. After a few moments' thought the General said: "I have it! I know the man! Orderly, ride to headquarters of the —— Regiment and ask Lieutenant —— to come here." Away went the orderly, and in a little time the lieutenant reported at the General's headquarters, which were in a corner of the Virginia worm fence which surrounded the meadow where the troops were bivouacked. An old tent fly thrown across the top completed this unique marquee, and was, in fact, its only distinguishing feature.

"I am at your service, General." The speaker was a man of very uncertain age. Boyish in looks and actions at times, he nevertheless impressed one with the idea that he was older than he looked. He had seen service on the frontier, was with Walker in Nicaragua, and was a reckless daredevil, so far as himself was concerned. His delight was to be sent out with a small scouting party, and no matter how few in numbers it was, he always succeeded in harrassing the enemy fully as much as though he had a brigade at his command. On such occasions, reckless as he was, care for his men was the first consideration; and though he had often ventured into very dangerous situations with a score of men, and oftener with a less number, he never had one of them captured or hurt; and so proverbial was his skill in getting safely out of tight places that he was generally known in the Seventh Division by the soubriquet of "Weasel." He had often been employed by General Morgan in matters requiring no little courage, skill and address; and from the fact that he had always volunteered his services on such occasions, the General hoped, not without reason, that he would accept this commission. He was not mistaken. The fact is that the lieutenant was a man impatient of restraint. He hated the routine of military life and its etiquette. It was tiresome, and he grew restless and chafed under it. Given the command, he would have been to the Union cause what Mosby or John H. Morgan was to the Rebellion.

"You are prompt as ever, Lieutenant," said the General. "I have a difficult task to perform, and I sent for you, hoping that you would undertake it."

"I will, sir, unless it looks to be absolutely impossible of accomplishment."

"It is by no means impossible, though it is a dangerous errand, and requires care, courage and skill to make it a success."

"If you choose to entrust me with it, General, I will do my best for you."

"I know that, Lieutenant; I know that. It is upward of fifty miles to Greenupsburg, on the Ohio River. There is a strong force of rebel cavalry between us and that point. Five miles in advance of us, at a cross-road, on the turn-pike, is a strong cavalry picket. Where the main body of the enemy is I do not know, nor do I think it worth while to order a reconnoissance to find out. Our men are too tired; and then, too, if they mean to attack us here, we shall know where they are soon enough. What I want now is a messenger who will carry dispatches to Greenupsburg.

"I think I might venture to promise so much, General."

"The difficulty is not only in reaching Greenupsburg, Lieutenant, but in reaching there in time. My dispatches should be in General Wright's hands within twenty-four hours at the furthest. You will of necessity start at once."

"I will be ready in twenty minutes. I prefer to look after my arms and equipments myself, General. In twenty minutes or less I will be here again ready to receive your dispatches." He saluted and was gone.

Scarcely had he gone a dozen steps when he was accosted by a chaplain of one of the regiments.

"Lieutenant!"

"Sir."

"Are you going to Greenupsburg?"

"I am going to try to get there."

"May I go with you?"

"I would advise you not to go. You are not as well mounted as I, and besides I have made up my mind to take a somewhat desperate chance of getting through the enemy's lines. It is unnecessary that you share the risk; furthermore, the division will be in Greenupsburg within three days. Better not take the chances, chaplain."

The chaplain was a good, easy-going sort of man, but thoroughly disgusted with military life and all that pertained to it. To reach the Ohio and civilization was a mania with him. He was thoroughly homesick, and every day spent in camp or on the march was equal to a lifetime in purgatory. He thought that a ride to Greenupsburg with the lieutenant would be a relief, and was ready to hazard everything to accomplish it. He had little trouble in securing the requisite leave from the colonel, and was back to General Morgan's quarters almost as soon as the lieutenant. Taking the lieutenant aside, the general gave him his instructions. They were, of course, verbal; there was nothing then to fall into the enemy's hands, should the messenger be so unfortunate as to be captured.

"You fully understand, Lieutenant?"

"I think I do, General."

"Well, good luck, and God bless you."

"Thank you, General."

"Stay! Have you decided on the course you will pursue to avoid the enemy?"

"I shall try to avoid the enemy, General; I shall run the picket."

"Run the picket! What! Why, man, are you crazy?"

"I hope not, General. I do not think it a difficult matter. Do you not see that if I go prowling through a country to which I am a total stranger, trying to pass around the rebel forces, I am liable to be captured at any instant? In fact, I am liable to get lost in the darkness and wonder into the rebel lines at any moment. If they have a picket at the cross-roads beyond here, it is certain that their main body is bivouacked at some point off the direct road, so that if I can succeed in dashing through that picket, once beyond the crossroads I am all right; and I will be in Greenupsburg in six hours. There is, of course, some risk, General, but I assure you it is by far the easiest plan for me to pursue." For a moment General Morgan had half a mind to countermand his order, but then he reflected that the lieutenant had always been very lucky; that he seemed confident of success in this instance; and knowing no one else in the Division half so likely to succeed, he concluded to let him go; and so, shaking his hand again, he bid him "God speed." Just then the chaplain rode up and presented his "leave."

"And where are you going?" said the General.

"With the lieutenant, sir, if you will approve my leave of absence."

"Well, I'll be ——!" ejaculated the now thoroughly astonished officer. "Here, Captain Joline, approve this leave, and let the —— parson go to sheol, if he must." The A. A. G. affixed the necessary indorsement, and away went the chaplain to overtake the lieutenant, who was already on the road.

It was now nearly 10 o'clock. The night was warm but not oppressive. There was no moon, and yet it was not dark. It would have been bright starlight, only there was a soft haze in the atmosphere, veiling the stars as it might have been in a covering of gauze. One could distinguish the white dust of the turnpike for some distance. It was perfectly still. Even the hum of the camps was dying down, and the tread of the horses sounded as though their hoofs were muffled. The lieutenant was superbly mounted on a thoroughbred which but a few months before had graced the stables at Ashland, and was one of the best ever owned on that celebrated farm. The steed and its rider were in full accord; they seemed to understand each other perfectly. Indeed, the lieutenant attributed the larger share of his success in dangerous enterprises to the wonderful intelligence and immense endurance of his equine friend. Almost unequalled for speed, the horse was as brave as his rider, and carried him into a melee with a restless force, scorning pursuit if necessary to retreat. Both horse and rider had unbounded confidence in each other. The chaplain's mount was a little dapple-gray pony that, to use a common expression, could "gallop all day in a half-bushel measure"; good enough for a steady march, but for an enterprise like the present one, worse than useless. As a matter of fact, the rider would have been safer on foot. It was not until the chaplain had joined him on the road that the lieutenant began fully to realize the fact that his companion was not only likely to lose his own life in the attempt they were about to make, but seriously to endanger his, besides rendering the entire scheme abortive. But, knowing the parson's peculiarities as well as he did, he rode silently forward, trying to think of some argument which would be likely to induce the reverend gentlemen to turn back. For some miles they rode quietly, neither of them uttering a word. At last the lieutenant suddenly drew rein, came to a dead halt, and said:

"See here, parson, I want you to go back to camp. I beg of you not to go any further. Every step now in advance increases our danger. The chances are desperate for me, who am used to these risks, but with you along, a non-combatant, and unarmed, the chances against us are 100 per cent greater. I entreat you to turn back."

"I shall not turn back. I see no more danger for me than for you. If you can take the risks I can. And the fact that I am a non-combatant and unarmed is in my favor; and is to my mind an element of success also."

The lieutenant, never at any time very patient with anything he looked upon as an exhibition of folly, was by this time pretty thoroughly out of humor. Then, too, he was a confirmed skeptic regarding the usefulness of chaplains in the army, and consequently had but little respect for the "cloth"; added to this, he was a well known skeptic in religious matters, and had a somewhat widespread notoriety for a variegated and picturesque profanity, especially in a fight; so that, take it all in all, he was not inclined to be either polite or agreeable on the present occasion. Not that he disliked his companion; on the contrary, as a man, he rather liked him; but he was disgusted at what he looked upon as his stubbornness. But he answered as quietly as he could: "Less than two miles in our advance is a cavalry picket. I am going to run that picket if I can. If my plans do not miscarry I stand a fair chance to get through. I am entrusted with dispatches. It is my business to deliver them at any risk. You hamper me in the performance of my duty, and if I were your superior I would order you back at once. I can see that your persistence in this matter is the supremest folly. If you were as well armed as I am, with the disposition to use your weapons that I have, and as well mounted also, we might work together more effectually; and even then the chances that both would get through that picket unharmed would be lessened a hundred per cent. Don't you see it?"

"No, I do not. On the contrary it seems to me that we would stand double the chance to escape under the circumstances you mention."

"See here, parson, your knowledge of the laws of chance will never overburden your brain. I am now going to explain the situation to you, and then leave you to your own resources. By the way, have you decided upon any plan of action when we encounter that picket? Have you given a moment's thought as to what you would do?"

"I have not. I shall go on and be governed by circumstances."

"Just as I expected. Well, I have no doubt that you will; but in my opinion you will find them to be devilish adverse circumstances before you get through. Now listen. In a short time we will be challenged. It will come from one of two videttes, who will be sitting on their horses a thousand yards or so this side the main picket, and in such a position that they can see our approach or at least hear it. When challenged——"

"Suppose they fire without challenging? It is not uncommon."

"I do not think they will, for the reason that they are likely to have patrols out, and they would naturally mistake us for some of their own men returning. Well, as I was going to say, when challenged I shall answer "Friends with the countersign." The order will be: "Advance one friend and give it." You must then come to a dead halt. When you hear the crack of my revolver—turn right about and travel for camp as though the devil were after you."

"No, sir; I'll not do it."

"Then send both spurs to the hilt in that nag of yours, and follow me. And may God have mercy on your soul."

"All right, lieutenant; I will follow your directions and you, too."

"Not far, I fear. Don't you see that mounted as I am, I shall dash through that picket before they have time to form a line to intercept me, but that they will be just in time to catch you? Good heavens, man! can't you see? If it were daylight your cloth might be some protection. As it is, they can't distinguish your parson's uniform, and they will fire on you just as soon as on me. I tell you, chaplain, you are going to ride straight to your death."

"Oh, well, Lieutenant, I don't fear that at all. But why don't we both ride forward at the same time?"

"Of all the —— idiotic ideas I ever did hear! Why, you ——, don't you know that we would be fired upon at once? And then, once the alarm given, there ends all hope of success in that direction, if not any other. See here, parson, since you are not inclined to follow the advice I have given you, here is a proposition which, if you will carry it out, will not only aid me, but entitle you to promotion. Just you go on ahead, and when challenged by the vidette ride up and ask to be conducted to the officer of the guard. One of them will call for the corporal, who will come out and escort you to him. When you see him, just mention that you are the chaplain of the —— Regiment, and ask him and his men to join you in prayer. When you get them all down on their knees I can run that picket just like falling off a log. See?"

The disgusted parson didn't see, and they rode on. They were now nearing the point where the lieutenant supposed the videttes to be posted. He drew his revolvers from his holsters and thrust them into the legs of his boots. He took care to see that every part of his own and his horse's equipments were in perfect order. From this time he paid no heed whatever to his companion, but gave his whole attention to the situation before him.

They were now descending a gentle slope toward a little stream that crossed the road a few rods in advance, when the lieutenant's attention was attracted toward the opposite rise of ground. He at once suspected the presence of the videttes, but made no remark. Riding into the little stream, he allowed his horse to drink, and from here, the ground being lower, he could distinctly trace the forms of the two sentinels outlined against the clear sky beyond, but a few rods in advance. It was too dark in the little valley for the videttes to distinguish the two men, and yet it was plain from their actions that they mistrusted the presence of somebody or something in that locality. It was but an instant more, and then came ringing out in the still air: "Halt! Who goes there?" "Friends with the countersign!" was the prompt answer, and at the same instant one might have heard the click of a revolver. The chaplain sat half-dazed upon his horse. The scene had opened too suddenly for his comprehension.

"Advance one friend, and give the countersign!" and the lieutenant, revolver in hand, rode steadily up the slope toward the expectant sentinels, as coolly as if about to give the countersign to a sentry of his own regiment. To the half-paralyzed parson it was a moment of the most intense excitement. Directing the horse as if to pass between the videttes, the lieutenant rode on until the heads of his own and the opposite horses were almost together; and then leaning forward as if to speak the fatal word, and just as one of the videttes moved forward to receive it, quick as thought he fired right and left, and the men rolled from their saddles as their frightened horses turned and galloped wildly back toward the picket.

Giving his horse the spur, the lieutenant dashed at full speed toward the same point, passing the frightened brutes on the way. In a moment he became aware that for once in his life he had made an error, and the chances were that it would prove to be a fatal one; but it was too late now to correct it. He had miscalculated the distance from the videttes to the main guard. It was more than three times the distance he had calculated upon. He had expected to pass the pickets before they could mount and form a line to intercept him, and he well knew that there was not one chance in a hundred that he would be shot while passing; but now the men were mounted and their line was already half formed. With a revolver in each hand he dashed into their very midst, firing right and left. In a moment two or three saddles were empty and their occupants were being trampled under the hoofs of their comrades' horses. A perfect babel of shouts, shrieks, oaths, yells and groans, mingled with shots from carbine and pistol, rang out upon the midnight air. So great was the confusion that the rebels often fired upon their own comrades by mistake. Into this tangle the lieutenant emptied his revolvers, at the same time yelling fast and loud enough to fill a yelling contract for a score of Commanche Indians, with a few extras thrown in for full measure. The riderless horses of the fallen videttes increased the confusion. The lieutenant saw his chance. In the shifting scenes of the tragedy only one man barred his way across the road. Hurling an empty revolver at his head, he gave his horse the spur, when, rearing upon its hind feet, the gallant beast threw himself like a huge projectile upon horse and rider. They went down under the shock and the way was clear. In a moment more the spirited steed and his intrepid rider had vanished into the darkness. A few of the troopers started in pursuit, but they soon abandoned it, and our hero sped on his way unmolested to Greenupsburg. Eight hours from the time he left General Morgan at Grayson his dispatches were in the hands of General Wright at Cincinnati.

The next morning, when our advance reached the crossroads, they found the body of the poor chaplain, stripped and lying among the carcasses of some dead horses. He was buried beneath the shade of a little grove of trees in an adjoining field, and on one of them was carved his name and the date of his death. General Morgan, after the lieutenant had left his quarters, dispatched an officer to one of the Kentucky regiments, who claimed to be familiar with the country, to the same destination and on the same errand, with orders to take no risks, but to pass around the rebel forces; so certain was he that the lieutenant would fail in his hair-brained attempt, and when he learned of the fate of the poor chaplain he congratulated himself that he had done so, for he had no doubt that the reckless officer was either killed or a prisoner. Imagine, then, his surprise to meet the lieutenant as he rode out to welcome the troops on their entry into the town. The messenger who took the round-about course reached Greenupsburg a day behind the troops, and the general was fain to acknowledge that running a rebel picket was a success.

STORIES ABOUT CARDS.

Remarkable Hands That Have Been Held by Habitues of the Card Table.

Not very long ago the entire British Empire and a large portion of the United States was all torn up over the well-attested story of the Calcutta Club man who held thirteen trumps in a single hand at whist. But stories of the peaceful game are few and far between as compared with tales concerning that most fascinating pastime where hands are (generally) completed after a discard and a draw, says the St. Paul Pioneer-Press. It is almost as hard not to falsify about phenomenal hands at poker as it is not to tell plain, every-day lies about strings of fish, but the writer knows a few five-carders worth chronicling.

Only a few evenings ago a well-known gentleman of St. Paul, desirous of inducing his fair wife to give up an out-door engagement (the night air was cold and the lady none too strong), offered to stay at home and play two-handed poker "for keeps." The offer was accepted, table stakes fixed at an amount sufficient simply to give zest to the play, and the game went on with varing fortune. Finally the gentleman stood pat and raise the come-in. His wife stood the raise and drew one or two cards, making a king full. She bet all she had, and at the show-down the dear fellow displayed a straight flush of clubs, with the ten at the top.

The writer once assisted at a game in which there were seven players. One man had the king, queen and ten of spades, and, as a bluff, raised the ante. Three others stayed. The would-be bluffer called for two cards, getting the ace and jack of spades, and sitting comfortably behind a royal flush. One of his three opponents made a queen full, one got "big Dick" (aces and kings), and the third—and this is the marvel—to the nine, eight, seven and five of spades drew the four of that suit, making two spade flushes in opposition, one of them straight and the other within one card thereof.

Captain MacDougall, of the Seventh Cavalry, and Adjutant Cook, who died with Custer, once held two straight flushes against each other, one of diamonds, the other of hearts and both headed by the jack.

During the flush times at Julesburg, on the Union Pacific railway, three gamblers, one of them still alive, held flushes identical as to value, all the suits but clubs being represented when the final call was made. Argument to the effect that spades was the royal suit on the part of the man who held the flush of that suit and an attempt to make his logic irrefutable by the use of a 32-caliber, cost the logician his life at the hands of the "heart" man, who "drawed a leetle the quickest."

HE BOUGHT THE BEST.

But, Says Eugene Field, He Will Not Let It Happen Again.

I have bought a dress, writes Eugene Field from London to Chicago News. I paid thirteen guineas for it. The estimable lady for whom I made the purchase had expressed a yearning for a tailor-made suit, a good one being procurable for five guineas, or twenty-six dollars. But in common with others of my sex, I was laboring under that abominable delusion which we like to utter, viz.: "'Tis always cheaper to buy the best." So far as I am concerned, that heresy is exploded. What I paid originally for that fine dress hardly figures with the money that it has cost to run it. A naturally domestic woman no sooner becomes possessed of a lovely gown than all of a sudden she conceives an ambition to tread straightway the frivolous round of fashionable society. Hosiery, kerchiefs, bonnet, gloves, shoes and countless trifles must be purchased to match the seductive garment. The top of a tu'penny bus is no longer good enough for her; she must ride in the three-shilling cab; she must have a new silk umbrella and a new silk gossamer in order to be fortified against the weather, because to wrinkle, spot or dampen that new thirteen-guinea dress would constitute an offense more grievous than the sum of the seven deadly sins. Moreover, that fine gown attracts beggars and invites pick-pockets; it compels a liberality that is false and wholly unwarrantable, and it entails expenditures highly demoralizing. That gown, too, claims and enjoys more than its equitable share of space in the family closet—before it the cherished habiliments of the husband are either swept away under the bed or thrown profanely over the broken back of the rickety chair in the corner. So we see that this wicked heresy, which would fain teach us that it is cheaper to buy the best—this heresy, I say most solemnly, engenders not only financial misery but intermarital discord; and against its indulgence and promulgation I protest, stand and revolt.

How the Czar Is Loved.

It is related of the Czar that when he was staying at Gatchina a man working in the grounds of the castle, every time he saw the Emperor approaching, ran away and hid himself; this occurred so often that the man was taken to task and asked the reason why he did this. He replied: "I am so afraid that the Czar, if he sees me, will take a great dislike to me, when perhaps I should be sent off to Siberia, so I hide myself to keep out of danger." This ingenuous answer shows how the Great Father, as he is sometimes styled, is regarded by his subjects.

BUILDING RUBBER BOOTS.

The Various Stages of the Intricate Operation Aptly Described.

It is forty years, observes the India rubber World, since the first rubber boot was made, and a very clumsy specimen of foot-wear it was Prior to this old-fashioned rubber shoe was in existence, but not much worn, and it was called galoshe. The styles of boots now made are nearly identical in all of the leading rubber companies, each, however, having some strengthening device of more or less excellence upon which they pride themselves. All boots are made by hand upon wooden lasts which are prepared of carefully seasoned maple. The seasoning is necessary, else the trees would shrink in vulcanization and become worthless. Iron lasts have been used, but are practically "barred out" by their great weight.

A well-arranged boot-room has a wide center circle running its entire length, through which run cars for the easy removal of the finished boots to the "heaters." Running from this main passage-way are the tables of the workmen, in front of each of whom is a long table, fitted with a vise capable of holding fifteen pairs of boots. A portion of this table is padded and reserved for the work of making, the tools for this being simply a knife, hand roller, a stitcher, a knife and a cement cup and brush.

As the various pieces that are to be joined together to make the perfect boot are brought in "books" to the table of the maker, they are first laid over the last and cemented with a paste made of rubber and benzine. The first step in order is the lasting. A tree is put upon the last, "block" with the foot upward, and the leg-lining, of felt usually, is wrapped round it, and connected at the heel by a bit of "piping." The edges are then laid over upon the inner sole where they stick fast. The lining is then secured up the back by drawing the piping tightly over the rubber coating. Next the lining is fastened at the top of the tree to make it firm and also to take out any looseness that may be in it.

Then the foot-lining is connected to the instep and lapped over on the inner sole. A rag filler is the next necessity to fill the space left on the sole between the lower edges of the leg lining. To this, and indeed on the whole bottom of the boot, is placed a tough sole made of rubber and fiber, called the "rag sole." This is "skived" all round, and then both rag sole and lining are brushed over with a fine quality of rubber cement and left to dry.

When the benzine has fully evaporated from the cemented surface the process of "trimming" is the next in order. First the holes are cut for the straps and they are placed in position. Then a small "heel-stay" of cloth is added, followed by an "ankle-piece" of rubber cut without "lapping" at the back. A heavy counter of rubber and fiber is put around the heel next, to be followed by a "back-strip" of rubber that runs up the seam in the lining from the heel to the top of the boot. This is succeeded by a toe-strip of piping, a toe-piece of rubber, and side stays of the same, when the boot is ready for the "cover."

All this time the boot has the look of some of these *felt* boots that car-drivers in Chicago fancy, only this is decorated with cement and trimmings, and the other is plain. The leg cover is of rubber and goes over the whole with the exception of the sole and a part of the toe. It is put on with great care.

The third stage, known as "covering," now follows. In this a counter of heavy rubber is put around the heel, the piping being in line with the back seam, the edges being carefully "rolled down." Then a vamp of heavy rubber—the "tongue"—exactly covering the inner lining. The sides of this extend down to the counter, and are distinguished by two side seams. These seams are then run over with a "double stitch," which is similar to a pair of sharpening wheels, and which not only refasten the rubber to the cement face beneath, but also make a very neat finish. After this the vamp is rolled around the outfiller, and the top of the boot receives a coat of cement which is to hold the sole on.

When the boot is dry it is ready for the fourth stage, which is "soling." To digress a little, a sole is in four parts and is made up for the bootmaker in the soling room. These four parts are of fiber and rubber "form," a thin one, "sole-piece," a "top," and a heel. These are put together and are sent to the boot room to be covered with the strongest possible rubber cement on the bottom and edges. The sole is attached to the partly finished boot at the "last," brought over to the heel that the boot may sit straight. Then the heel is hammered, the sole rolled, the edges rubbed down in the vamp and counter. The seams are stitches, and the boot is sent on to the varnishing room and thence to the vulcanizer.

Timely Attractions of Women.

The great art—not duty—which women have to learn is, says a brainy writer, how to make the best use, in its own time, of the various kinds of attraction, the various sorts of charm practicable by them—each beautiful in its way, but only perfect when in harmony with age and condition. For instance, the simplicity of a child is silliness in a full-grown girl; the unsuspecting frankness of a girl is loose-lippedness and undignified want of reticence in a woman; the instinctive coquetry and desire to excite admiration and love in a maiden, become folly and heartlessness, and a fixed habit of inconstancy, and, as time goes on, a ghoulish craving in a matron, and so on through the whole list.

Most Likely He Will.

An European inventor has constructed and offers for sale a clock which he warrants will run 10,000 years at each winding. If it stops short of that time the purchaser can return it and get his money back. It would be interesting to know if the man who winds that clock 10,000 years from now has to climb out of bed on a cold winter night and stand on a wabbly-legged chair while he does it.

American Business Man—"Now, sir, you have all the details of my new manufacturing scheme. If we succeed we'll make millions." Timid Capitalist—"But if we should fail?" American Business Man—"Fail? In the bright lexicon of American enterprise there's no such word as fail!—because whenever a thing doesn't pay we can always unload on an English syndicate."

AN OBSTINATE OLD MAN.

An old man lived all alone, all alone,
And a jolly old man was he.
He was ruddy and fat and sleek as a rat,
And his leg was a good thing to see.
His chest was round, his liver was sound,
And his voice had a chord of glee
As he sang to himself while he counted his pelf:
"Oh, ho!
I'm a hearty and hale old man,
Ah, ha!
Such a sturdy and well old man!"

Not a chick nor a child had he in the world:
Though his coffers were full of gold;
He had money in chest, in trousers, in vest
And in pockets the big dollars rolled;
He owned miles of land and palaces grand,
And in bank had thousands untold,
As he sang all the while, with a confident smile:
"Oh, ho!
I'm a likely and peart old man,
Ah, ha!
Such a merry and brisk old man!"

His brothers waited and longed in vain,
And for years I ween a score
They would meet each day and pleasantly say:
"The old man is right at Death's door."
But the first one slept and he never wept,
But he laughed and sang the more,
And he gayly cried when the last one died:
"Oh, ho!
I'm a healthy and long-lived man,
Ah, ha!
Such a vigorous, sound old man!"

Each night his nephews and nieces dreamt
Of how rich they were going to grow,
And they loved to hint: "We will never stint
When our ship comes in, you know."
But, grieve to tell, he kept hale and well
While the years went dragging slow,
And he cackled loud o'er the last one's shroud:
"Oh, ho!
I'm a hardy and stout old man,
Ah, ha!
Such a lusty and tough old man."

And he is living yet all alone by himself,
This man I am singing about,
His eye is bright and his step is light,
And his voice is cheery and stout;
His cheeks are red and he holds up his head
In a way that puts death to rout,
And I can't see why he should ever die—
Oh! dear,
Such a healthy and well old man,
Ah! me,
Such an obstinate, tough old man!
—George Horton, in Chicago Herald.

JOE'S PARTNERS.

He Takes One for Life After Having Lots of Trouble.

From the time he settled in the camp he was forever picking up the stragglers who came along, no matter how shiftered or unsavory they appeared, giving them work on his claim, and now and then taking one into partnership—generally with the result of finding himself cheated and deserted within a few weeks' time—but just as cheerfully trying the experiment over when the next tramp came along, notwithstanding the remonstrances of his friends.

"Some of them toughs'll cut your throat one of these nights for the sake of the dust you've got," they predicted.

"No need of that, when they're welcome to it without," answered Joe.

He was an easy-going individual, whose work only sufficed to keep his wants well supplied, though there were men who declared that if they had Joe's claim they would grow rich from it.

The wonder was that no one of his partners had stuck long enough to test the fact.

"Joe's too confounded lazy hisself to get down to solid business with his pick and shovel, and them vagrants—that's no good in the whole kith and kin of them," the camp pronounced. "They never calkilated to do nothin' but impose on his good nature; and I tell you what, boys, it's no credit to the camp to have them hangin' round, and I propose if he don't let up on his promiscuous charity, to be one of the committee that'll warn him to get out. He may be willin' to run the risk of bein' robbed and murdered hisself, but 'taint right to ask all the rest of us to do the same."

"Time enough to talk when somebody's been robbed and murdered," said Joe when the speech was reported to him.

And it was not more than a week later that news went around that Joe had taken another partner.

Nigher to bein' a cadaver than a live man, to judge by his looks," declared the informant. "I reckon that Joe at last has got holt of the angel he's been lookin' out to entertain unawares. He'll be goin' to jine 'em afore long, anyway. Do to start a graveyard with, seein' as Tipsy Bill disappinted us by jumpin' into Deep river when he got the jams and Big Saul was run out of camp afore he killed his man. Be to our credit if we get a natural death to start with."

This favoring view of the case was helped along when they found Joe laboring alone on his claim a day or two afterward.

"Pard's laid up to-day," he imparted. "Got the consumption, boys, and is most gone with it. Coughs dreadful of nights, an' has a bit of a girl wife waitin' for him to go back to her. I'm goin' to work double turns to make up his pile for him, and if any of you-uns wants to help, here's the chance for you. I ain't axin' it out of your pocket, understand, but in work on the claim."

And Joe got the promise from every man present to do his share.

Was it any wonder, then, that their indignation rose, on their return to camp, to find their cabins rifled of their ready dust and the consumptive gone, leaving no trace behind him?

Joe was the most crestfallen man of the lot.

"I wouldn't have believed it," he declared. "If you can make up your losses out of my claim, boys, I'll be glad to have you do it. I've got to give it up now; you was right and I was wrong 'bout pickin' up strangers that way."

"Then let it be a lesson to you, Joe. We'll forgive you and say no more about it, if you won't take up with any more pardners."

And Joe promised readily

A month went by, and then one day he appeared before them.

"I want you to let me off on my word, boys. 'Tain't in natur' to turn him off—just a bit of a boy; no harm in him. You'll say so, I know."

And in spite of their prejudices they did say so, for the pale lad, who scarcely looked more than sixteen, touched their warm hearts with a feeling of pity, and he speedily became a favorite among the men, so willing was he to render any service, so eager to be of use about the camp.

"Let me cook for the lot of you!" he begged. "I'm a famous hand at it; my mother taught me how. And I'll tidy up your cabins better'n you keep them. You can try me first, and then pay me what you like in dust. I'll have time enough aside from workin' pardners with Joe."

Which turned the laugh against Joe, whose time was given more to his pipe than to his claim.

The boy Andy was soon quite at home all over the camp. He was as good as a woman around, the men declared, which remark Andy rather resented.

"I'd rather have you say I'm an improvement over Joe's other pardners, but mebbe you'll be running me out some day like you wanted to do with them."

"It all depends on how you behave yourself, you know. If we catch you foolin' around our dust like the last chap did, we'll do wuss'n run you out."

A night or two after that Joe sat suddenly upright in his bunk, wondering what had wakened him.

"Andy!" he called, with his heart thumping strangely.

No answer. Andy was not in his bunk, but his place there was warm.

Fearing something, he scarcely knew what, Joe hurried out just as he was—half-dressed but bootless—and making no sound, came close upon a group that moved from one of the cabins.

"I was awake and saw him at the job!" a man's low voice declared excitedly. "I'd left a light burning, as I didn't feel well and I swar it was Andy. I was too thunderstruck to say a word. Slippery little rascal! But when he lit out, I followed. He took up the hill towards Beagle's *cache*, and I routed you'uns out so you could see for yourselves. We'll be in time to catch him if we hurry up."

But the unseen listener was quicker than they. Running lightly, he came first upon the boy and caught him by the arm, dragging him along.

"They're onto you, Andy; you'll have to skip! What did you do it for? But thar, make tracks; for they'd be hard on you, they've been fooled so often. They're comin'! Run now, run, and I'll cover your trail!"

Panting all this as they ran side by side, Joe gave the boy a push at the last, and himself turned in the direction of his cabin, showing himself to the pursuers just enough to draw them upon his trail.

But he halted at his own door and faced them, saying:

"Now, then, what is it you want?"

"You. Joe—t'wan't you back thar? 'Course not. It's Andy we want, and don't you stop us."

"It was me you run down from Beagle's *cache*, if that's what you mean," declared Joe, coolly. "You've poor eyes if you don't know me from Andy, even in the dark."

His tactics did not work, however, for Joe's honesty was too well known to be doubted.

"Pshaw, boys, he's givin' you a bluff! It was Andy I seen. Out of the way, Joe, or this here'll speak!"

"Let it!"—from Joe.

Then there was a scuffle, cut short by a revolver shot, for the miner who had seen himself robbed, as he believed, was now thoroughly roused and careless as to consequences.

There came a cry from the near darkness:

"Don't shoot! I'm here. Oh! Joe, are you hurt?"

Joe had started and staggered back, leaning against the wall, but now he groaned, less from pain than at finding Andy beside him.

"You'd orter 'a got. I'm afeard I can't save you now."

"Save me from what, Joe? I've done nothing wrong. You men, what is it you think?—that I've been robbing you? Go home and look at your dust. You'll find more there than you had of your own, for I've been paying back as I can what was taken from you by Joe's last partner. I did it in this way because I didn't want to tell you that he was my—my—"

"I reckon we know," broke in one of the men, quicker witted than the rest. "Mebby your name's Annie, instead of Andy. See here, boys, I believe this is all right, but one of you go look to make sure, and I'll 'tend to Joe while you are gone."

It was all right, and Joe's wound was not serious, and some time afterward this news was passed through the camp:

"Joe's took a life pardner this time. One he tried before, so he knows what he's about. She's a brick, that Annie. Paid back every stiver of the dust, in spite of us.

"Soon for a weddin'? Not, considerin' that she scarcely knew number one at all. He wasn't so bad a feller, either, to up an' marry her out of pity when her daddy died and left her alone; then sot out to look for work and went off with quick consumption, like we know. Can't say I blame him for cribbin' the means to git home to her first.

"She's made a better choice this time, for Joe ain't lazy any more; has something to work for now, he says. Tell you what, boys, come to the last, Joe's made a ten-strike in his pardner!"—Bert L. Thompson, in Philadelphia Saturday Night.

SCHOOLS IN GERMANY.

How Teachers Are Trained, Sustained and Paid in the Vaterland.

Teachers must take at least a three years' course in a normal school after completing what would be about our high school course, must be seventeen years old before entering this normal school, and therefore about twenty before beginning to teach, writes a correspondent of the Chicago Journal. On finishing this normal course they have to pass a thorough state's examination by a board entirely unconnected with the normal school, and after passing this examination they are given a school provisionally for two years. At the end of this time they pass a second examination, in which is considered their record for the two years past as to conduct and fitness for teaching. On receiving this certificate they must be at least twenty-two years old, and now enter their life work. There is no way of entering the profession except through these normal schools, and the demand and supply can be so regulated that every graduate is sure of a place, and is sure of keeping that place as long as he is fit for it. If the graduate has some particular vacancy in view, and the directors of that district wish him, he is assigned there; if not, then he and two others are sent to a place where there is a vacancy, and the directors have the privilege of choosing among the three. Once installed he can be removed only on complaint of the inspector and directors before the superior board, and on full proof of bad character or neglect of duty. The question of competency is settled by his certificate. He is supposed to get married about this time—a duty seldom neglected—and the district furnishes him a comfortable house of about six rooms, with a garden. Oftentimes this house is joined on the school building or consists of rooms above. If there are several teachers in the school, then each is provided with a house. The school hours are from eight to eleven and one to four, six days in the week, with Wednesday and Saturday afternoons free. The longest vacation is four weeks in summer, about ten days each at Christmas and Easter, and Sunday holidays, making about two months' vacation in all during the year. Children are compelled to attend school from the age of six to fourteen, boys until fifteen, so that every child, with a very few exceptions, gets from eight to nine years of schooling, ten months in the year, in a school under government inspection, and that must come up to a given standard, which is a high one. A great deal can be learned in this time from thoroughly-trained teachers, and this is probably just about double the amount of actual schooling that the average country boy and girl of America get, to say nothing of the hosts in the cities that get none.

In these folk schools the boys and girls are placed together, which is not the case in any other class of schools here. The teachers do not attempt every thing from the alphabet to astronomy, but confine themselves to reading, writing, arithmetic, spelling and composition, geography, history, Bible and drawing. Recitations are one hour each, except for the youngest scholars. Grammar is taught in the form of language lessons, in connection with reading, not as a lot of dry rules that mean nothing to the scholar, or a system of parsing that is simply slow torture to a child, but by the reading of a story or poem, talks about it, explanations of the meaning, searching out synonomous words, correction of bad forms of speech, and weaving in of grammar so unconsciously that the pupil learns it as a matter of course with no thought of hardship. In our most advanced city schools, no better teaching of the mother tongue will be found than in these humble, peasant schools of Germany, and a most admirable drill is here given in that very important branch. The Bible is taught one hour each day, and if every young German does not know his Bible thoroughly, it is not for lack of the opportunity. Men only are employed as teachers, for the reason that the state does not wish to give so much care and expense to the preparation of teachers who do not expect to made a life-work of it, and who, in the nature of things, would teach but a few years as a rule. Boys and girls just out of the common schools themselves, and scarcely ahead of their oldest pupils, students working their way through college, and young men studying for a profession, find no opportunity here to try their hand at teaching for a few months or years. This may be hard on poor but ambitious youths, but is a decided blessing for the pupils. In all villages and towns under 10,000 inhabitants the wages of teachers are, on an average, as follows: For the first ten years they get all told about $400 a year, the actual cash salary being about $375, to which are to be reckoned the house, garden, fuel, etc. After ten years of service and each five years thereafter they receive an addition of $25 a year until they have been thirty years in service, when the maximum of $525 a year is reached. In the larger cities the pay is increased according to the proportional greater expense of living. This is not large pay, but there is no time lost while out of work or during long vacations, the cost of living is small, and the teacher is much better off than most of his neighbors, ranking next to the pastor in importance and public esteem. At sixty years of age he can retire if he chooses with a pension for the rest of his life equal to three-fourths of the salary he is then receiving, and as he has generally been able to lay by a handsome sum, his old age is comfortable and happy.

WOMANLY VANITY.

The Secret of a Woman's Desire to Be Well Dressed Cleverly Explained.

"I am one of the women," said a woman the other day to a New York Tribune writer, "who willingly confess that our sex is vain. And you may be sure that we do not like to have our vanity wounded. When I see a pretty ribbon which becomes my complexion or a bit of lace which I know will catch the eye of my husband when he comes home from the office, I always feel that I have gained a victory in advance. If you think, you bachelor [and the bachelor tried to look miserable,] that I wear pretty gowns and bright ribbons and dainty bonnets for my self-gratification alone you are very much mistaken. I wear them because I know that my husband will admire them or that when men see me and meet me they will find them attractive. That is the whole secret of a woman's desire to be well dressed. And do you know that the more cheaply I can get one of my gewgaws or baubles the more I am pleased? You must not think and believe with the ignorant majority of men that a woman spends money without an idea of what she is doing. When I get a 'bargain,' something that I am sure will call forth the admiration of you men, I must wait for my husband to say after he has admired it: 'Well, I suppose we shall have to dismiss two of our servants to pay for our extravagance in dress.' Then I laugh when I tell him that the expensive luxury cost just sixty-five cents.

"But," continued the frank woman, "what I began to say, and what I intend to say, is that we know we are vain, and are, therefore, the more sensitive about it. Now, there is one way in which a man may incur the undying enmity of a woman. Let him affront her in public, where every one may see her humiliation, and nothing he can do will ever restore him to the good graces of that woman. He might conquer nations or rescue nuns from mobs, only to meet the haughty glance of cold indifference. So I am free to confess that the man whom above all men I hate most; the man who is my natural enemy and who will always be such as long as there are men, women and street-cars, is the driver of a surface car. How often have I braved the danger of madly-driven trucks, wagons and cabs to stand in the street and hail a passing car. How often have I seen that car go rolling past me, no one on it giving a sign of acknowledgment that I was in the world. The sensation of standing in the street as you beckon to a driver who looks straight ahead, utterly ignoring you, is beyond describing. And we are forced to look calm, cool and indifferent. We can not betray our real feelings, for a woman must always be a dissembler—look unruffled when her bosom is torn with distraction, appear interested when she is bored to death, and always fit her mood to the moods of other people. But I will confide to you that my mortal enemy is the driver of a street-car."

UNCLE JOHN SPRADDLER.

An Old Georgia Negro Who Is Something of a Philosopher.

"Uncle" John Spraddler lives in Smithville, Lee County, Ga. He is quite a philosopher, in his own peculiar style, says the Atlanta Constitution, and is considered an oracle by many of his colored brethren. Some of his quaint sayings are here given:

I doan know ef dis worl' is a fren' to grace or not, kase I know sum folks dat don't say grace at all.

De sayin' is, you mus' make hay while de sun shines, en' dat's why dere's sech a scarcity of hay. Folks don't like de sun, you see.

Religun is a great blessin', but sum folks hab a call to plow, en' tink it is a call to preach. Dat 'counts for de scarcity ob fa'mers 'mong de cullud race.

I doan b'leve in findin' fault wi'd dis heah worl', kase it's de bes't worl' I was ever in, an' it's a mighty long ways to de next one.

It's a long lane what ain't got no turnin', but tek care he don't turn too short and turn de wagon over. So don't drive too fast.

Dis race question is mighty easy to settle. Let de white man keep on bein' white, an' de nigger black, an' foller de mule faithful, an' quit loafin' roun' de kentry, an' hit'll settle jis like coffee.

When I see a man goin' home wid a gallon ob whisky and a pound ob meat, I know dat dere's a peck ob misery to ebery pound of happiness in dat household.

Dere ain't no use in grievin' over spilt milk, for ten to one, de milk wus half water, an' dere's plenty mo' wells in de kentry.

A SHREWD IRISH BOY.

How He Made Daniel O'Connell Redeem a Rashly-Made Promise.

Daniel O'Connell, the great Irish orator, when taking a ride in the neighborhood of his house had occasion to ask an urchin to open a gate for him, says the New York Ledger. The little fellow complied with much alacrity and looked up with such an honest pleasure at rendering the slight service that O'Connell, by way of saying somothing—any thing—asked:

"What's your name, my boy?"

"Daniel O'Connell, sir," replied he, stoutly.

"And who's your father?" demanded the astonished Liberator.

"Daniel O'Connell, sir."

O'Connell muttered a word or two below his breath and then added aloud:

"When I see you again I'll give you sixpence."

Riding briskly on, he soon forgot the incident and fell to thinking of graver matters, when, after traveling some miles, he found his path obstructed by some fallen timber, which a boy was stoutly endeavoring to remove. On looking more closely he discovered it to be the same boy he had met in the morning.

"What!" cried he; "how do you come to be here now?"

"You said, sir, the next time you seen me you'd give me sixpence," said the little fellow, wiping the perspiration from his brow.

"Here it is," said Daniel; "you are my son—never a doubt of it."

FOUR DINING STORIES.

None of them Are Chestnuts and All of Them Are Good.

Here are some dining stories, told by the New York Evening Sun's "woman about town," all good, all new, and each having its affidavit attached to it. Let's give the Englishman the precedence.

He was dining with a company of Americans somewhere in the country, and the waiter announced the dessert after the manner of his kind: "Peach—plum—apple—blackberry—lemon—custard pie." "You may bring me peach—plum—apple—blackberry—lemon pie," said the Englishman, in one wild plunge into unknown terrors. With a sly twinkle as he departed the waiter asked: "What's the matter with the custard pie?" while all the diners smiled till the dishes clinked together. And by and by, when all the pies were laid out before him, the Englishman looked up "in a contemplative fashion," and asked ruminatingly: "By the way, what was the matter with the custard pie, any way?"

That reminds us—but that's another story, as Rudyard Kipling says, and it's the Irishman's turn now.

He was newly arrived, this Milesian personage, and he didn't propose to be borne at once, body and soul, out of the old loyalty into the new. But he, too, was at meat, and was ministered unto after the usual interrogative way. "Red snapper, boiled whitefish, baked bluefish?" asked the waiter. Then all the Irish blood in his veins rose at once. "No, ye don't," he said. "I'll have neyther of thim. St. Peter! I don't be havin' th' Amerykin flag stuffed down me throat that way, neyther baked nur boiled nur fried! Ye may bring me some green peas and petaties, waiter."

Scene, Delmonico's; time, a few evenings ago. A party of men and women near the center of the room:

Mrs. Youngwife—Tom, dear, who is that distinguished looking man near the door? I always see him. Does he dine here regularly?

Tom—Yes, my dear, he has dined here for ten years past.

Mrs. Y.—Is he rich, Tom?

Tom—No, love, he has dined here for ten years past.

And now for the "that reminds me" story. The *naif* question of the Englishman over his pie suggests some consideration of the difference between the ponderosity of the English, and the quick darting of the American wit, a consideration which we shall only suggest here by illustration. Not long ago the London Truth was moved to relate that story familiar to all good-story-loving Americans which we tell in this crisp way:

Testy old man to small boy—Boy, what do you mean by always hollering just when I'm going by?

Small boy—Old fellow, what do you mean by always going by just when I'm hollering?

Now hear Truth: A somewhat irate old village squire was once moved to notice that a certain youngster seemed always in the act of hallooing while he was passing by. And so one day he said to him with that arrogance which, it seems, characterizes village squires: "Boy, why is that you always appear to be hallooing whilst that I am passing by?"

To which the boy responded, with that readiness which characterizes village boys: "Why is it that you are always passing by whilst that I am hallooing?"

STORIES OF WEBSTER.

How the Great Statesman Prepared His Famous Orations.

A Personal Acquaintance Still Living Talks About the Habits of New England's Most Eloquent Son—A True Friend and Liberal Landlord.

In the little town of Franklin, N. H., stands the house of George W. Nesmith, who had a personal acquaintance with Daniel Webster such as no one else now living can claim. A recent visitor to the judge, says the Chicago Herald, found him hale and hearty, though in his ninetieth year, and his mind seemed to be as clear and bright as in the prime of life.

"The first time I saw Webster," he said, "was in 1818, just after the decision of the Dartmouth College case. I was then a senior in that institution and I can remember having my attention drawn to two men talking together in front of the college church, and being told that one of them was Daniel Webster, who was on a visit to Hanover, after his great triumph. He was then in the prime of life, and was the idol of the town and college while he remained with us. A speech which he made at an alumni dinner, held during this visit, I was unable to hear, as these exercises were not then public, but those present informed me that it was well worthy of him.

"My personal acquaintance with him began in 1823 or 1824, when one day he came with his brother Ezekiel, to visit the farm where he had lived when a boy. I was introduced to him as he stood conversing in front of the tavern, and I remember that his talk was of the happy days he had spent there before going off to school and college. 'Zekiel,' he said, 'how would you like to take a third-story room with me in the tavern, as we used to do when boys? Do you remember how the rain used to patter on the roof, and early in the morning the roosters across the river woke us up with their crowing?' But Ezekiel thought he preferred high life below stairs. 'You don't understand the pleasures of living in a garret,' was the answer. 'Don't you remember that line in No. 117 of the Rambler: "How sweet in sleep to pass the careless hours," etc.?'

"I remember that I was surprised at his exactness in fixing the place of the quotation, and that I afterward looked it up to make sure that he had made no mistake. In 1829 Ezekiel Webster died of heart disease in the court-house at Concord, and Daniel came into possession of the whole of the old farm where the Orphans' Home now is. He at this time had more or less business to do with his tenants and about the farm, and he applied to me for help in this, so that by 1840 I got to know him quite well, and after that I saw a great deal of him.

"On the Fourth of July, 1846, he delivered the oration at Salisbury. About 1850, we were down there, and walked out into the pasture together, where he showed the rock upon which he wrote half of that speech. At this time he told me much about his speeches. 'Those I wrote in early life,' he said, 'I was afterward ashamed of, and I was sorry that I had ever had any of them published. Whenever I came across one I used to burn it up, but, of course, there were many that I never could get hold of. They were much sound and little substance. Joe Denny, a local critic, said that they were "full of emptiness," and this was a kind of criticism that did me good. From the day when I heard it I altered my style, and tried to avoid sophomoric display and bombast in my writings.'

"During the first part of his public career Webster used to spend much time in the preparation of his speeches. He would sit up all night working over them, walking about the room and repeating them aloud. He was always a hard worker. In one of the letters he wrote me, and which has since been published, he said: 'I have never eaten the bread of idleness, but for the last forty years I have worked twelve hours a day.' Still, in the last part of his life, he acquired a faculty in the arrangement of his thoughts which was simply marvelous. I was in Boston at the house of his brother-in-law, Mr. Page, on the Friday before he made his last speech in public.

"Some have said that he was very careless in money matters, but that was not so in his life about here. He was liberal and just with his tenants, but he wished them to be just toward him. He was charitable, but did not give away large sums. He almost always used to bring something for some of the old servants in his father's house, and he used to enjoy going around to see the people in the neighborhood, talking with them and comparing reminiscences. We frequently walked all about the country here together, and he often would surprise the farmers by calling them by name or alluding to some incident of his boyhood which they supposed had long been forgotten. Usually he came to Franklin about twice a year, and spent in all about three or four weeks here. Sometimes he would make this his headquarters and go off to the mountains with friends. On one such occasion he directed me to open all letters arriving in his absence. Among them were several from secret emissaries in France and England, about which he was very reticent when I handed them to him.

"I never saw him but once in Marshfield. At that time he used to rise between four and five o'clock in the morning, saying that it was then he could do his best work. He showed me many interesting and curious relics which had been given to him. Most of them were destroyed later when the house was burned. All of my personal letters from him I have given away, and many of them have been published."

America's Favorite Confection.

The favorite confection of the American woman is chocolate. If one stands for a few moments in any shop where sweets are sold, one is satisfied as to this beyond a doubt. Out of every ten pounds which pass over the counter in their dainty boxes, six pounds are some variety of chocolate.

The record for the largest amount of butter produced by a cow in one year has been broken by a cow owned by D. F. Appleton, of Ipswich, Mass., who, with three days to spare, produced 941 pounds and 11 ounces. The previous record was 936 pounds and 13¾ ounces, held by Landseer's Fancy, owned by Dr. William Morrow, of Nashville, Tenn.

VARIETIES.

THIS egg, madam," said the professor with asperity, "is not fresh."

"Sir," said the landlady, graciously, "it was laid just one week after you made your last payment."

SIR!" he said to the proprietor of a dry-goods store, "I have called to notify you not to trust my wife on my account, as she—"

"Don't worry, sir; it has been ten years since you have had any credit at this store."

WHAT can you do?" asked the editor.

"Well, I can't write, and I can't edit, and I ain't got no literary judgment; but if yer want a man that's all muscle to blame for writin' libels, I'm the feller yer want—see?"

MISTRESS (to servant who is about to throw away an old lamp)—What is the matter with that lamp, Bridget? Does it smoke?

Bridget—I don't know nothin' 'bout whether it smokes or drinks; but it goes out nights' mum!

FERGUSON—Why did Richard III. offer to give his kingdom for a horse?

McCusick—I don' know, unless he had once paid cab hire in New York, and thought it wou'd be cheaper to own a horse, no matter what he paid for it.

"How far back can you remember, Bobby?" asked his uncle.

"Well," said Bob," "I can remember when I didn't know how to play marbles."

"No further back than that?"

"Oh yes; I can remember when I couldn't remember at all."

PROFESSOR—Mr. Chumpy, I am anxious for your father's sake to break the long list of demerit marks you have won here. Do you think you will ever learn anything?

Mr. Chumpy—No, sir.

Professor—Mark Mr. Chumpy as having correctly answered all the questions put to him this lesson.

GIRL GRADUATE—So this is your editorial room, is it?

Janitor—Yes.

Girl Graduate—And are all these gentlemen editors.

Janitor—Yes.

Girl Graduate—Which one of them is "Wot"

TEMPERANCE Advocate—Governor, why are you so chary about tackling the liquor problem? You know our laws need some awakening of public sentiment to back them up.

The Governor—I suppose it's the old maxim of my father farmer that still clings to me. He used to say, "Never meddle with the bars, Richard, when you can climb the fence."

It is said that the sons of a very wealthy man were once boasting to friends of the advantages they enjoyed in the struggle of life. Their father overheard their boasting conversation and sadly remarked: "I had one advantage worth more to me than all you have named." "What is that?" they eagerly asked. "It was in being compelled to earn whatever money I had before I spent it," was the reply.

"CAN you direct me to the dressing-room, madam?" asked the fashionably-dressed society belle, who had just arrived at the full-dress ball in Washington, of the good wife of Deacon Pogram, the new member from the XXXIInd New Hampshire district.

"Sakes alive?" replied Aunt Jerusha, "don't wonder you ask. Here, put my shawl over you, child, and come this way just as fast as you possibly can!"

FOR OUTWARD APPLICATION ONLY.—Well, Mr. Murphy, how are you to-day—better?" asked the doctor.

"No, sorr, Oi'm worse—as full av pains as a windy," replied Murphy.

"Worse! Did you rub that stuff I sent you well into the skin?"

"Rub it into the skin? Av coorse not, sorr! I saw it was labeled 'fur outward application only,' so Oi just rubbed it on me clothes!"

SALESMAN at music store (to customer from Upthecreek)—You will give me a couple of dollars, you say, for that old, second-hand instrument? My stars, man, that is a Stradivarius.

Customer—A what?

Salesman—A Stradivarius, sir; a genuine Stradivarius.

Customer—Strad nothin'! It's a fiddle! Reckon I don't know a fiddle when I see it? I'll give you just $3.25 for the darned old thing.

NOT LIKE HIS FATHER.—An old lady who belonged to the time when courtesy was more elaborate than it is now, administered rather neatly a rebuke to a lad who did not come up to her ideas. She had known the boy's father when he was at Harvard, as now was the son, and as the latter could hardly remember his parents, who died in his infancy, he was always eager to learn all he could about them. The youth met the old lady at a country place one summer day, and had an interview with her upon the wide veranda, where she was sitting when he arrived. He lifted his hat, and then replacing it upon his head, went on talking to the old dame, who regarded him with looks of disapproval. "Do I look like my father?" the young man asked at length. "I cannot tell," the old lady replied, drily, "I never saw him with a hat on when he talked to a lady."

REPRESENTATIVE John Allen says all the primitive people don't live in Mississippi. "When I was stumping up in Pennsylvania two years ago," says he, "I had to put up one night in a hemlock town with half a dozen houses scattered about. I had been traveling over a dusty soft-coal road, and the cinders and soot were thick enough to give the impression that I was a Democratic darky. I stopped with an old Dutch tanner, and after supper asked him if he couldn't fix up so I could get a bath. He got a blue china bowl of soft soap, a roller towel, and led me about five rods back of the kitchen to a small horse-pond.

"'Dere you is,' said he, 'yust yump right in.'

"I looked around. The women were in plain sight in the kitchen, and three or four other houses were within a stone's throw.

"'Is this all the place there is?' I asked.

"'Yah.'

"'How do your women folks do?'

"'Dey vas all pooty vell. How was your's?'"

THE train for Cleveland was pulling out and had gained considerable headway when there came a whiz and the sound of splitting wind as a man with a tall silk hat crushed down on his ears dashed through the gates. He carried two valises, but they were apparently as light as feathers, for they did not interfere with his mad rush after that train. He fairly flew along the platform, and the brakeman on the car was so busy looking at a girl in the window of the National Hotel that he did not see him. The crowd yelled and whooped, "Get there, old man!" "Pull for it hard!" "You'll make it if you don't fall dead!" and a hundred such aggravating remarks. The man made an heroic effort, but he didn't have the legs and the brakeman didn't see him—thus he missed the train. He came slowly back to the gates, put down his grips, mopped his face and remarked:

"Well, I'll be blowed." He didn't say blowed, but let go at that.

"Had a very lively run," suggested a meek and lowly gateman.

"Rather. Just my luck, though, to miss that train. "Why I would not have missed that train for $50."

"Where are you going?" once more asked the gateman with the ginger-colored whiskers.

"Lafayette. And I have an important engagement there to-night."

"Well, you can keep it."

"Hey?"

"The train you were chasing goes to Cleveland. The Lafayette train don't start for eight minutes yet. There it stands."

The drummer didn't say a word. He gathered his grips and climbed aboard the car, while the faintest bit of a smile hovered about the meek and lowly gateman's chops.

Chaff.

It will just be like George Francis Train to keep running around the earth now until he is taken for a tother equator.

Guest (at country hotel)—Good heavens, waiter, here is a fish in my milk! Waiter—Well! If that darned cow ain't been in swimming agin!

He—Were you ever in love? She—I thought I was once, but since I have read a few of these modern society novels I have concluded that I wasn't

Mr. Staid—And is Miss Giggiegaggie well educated? Mrs. McRae—Educated? I should say so. Why, the ribbons on her graduating dress alone cost over $50.

A Plausible Reason.—Gladys—The freshmen class seems to have so many tall men this year. Jack—Probably had their legs pulled by subscription fiends.

Stranger (with red nose)—Will you kindly direct me to the nearest place where I can get painting materials? Citizen—Certainly, sir; saloon on the next corner.

A popular soprano is said to have a voice of fine timbre, a willowy figure, cherry lips, chestnut hair and hazel eyes. She must have been raised in a lumber region.

Another Weighty Consideration.—Salesman (seductively)—A great bargain, sir. They have been reduced to fifty cents. Tom Allbroke—So have I. And I haven't dined.

"Do you read minds just as you would a book?" asked Howell Gibbon. "Sometimes," returned the mind-reader: "in your case I would rather say it just as I would a paragraph."

Angry Customer—The eggs you sold me are stale. Your placard says "a lot of fresh eggs." Grocer—No, it doesn't. It reads "a fresh lot of eggs." They came in yesterday.

Mr. Miffson (a wealthy widower)—My little boy is very slow about learning to walk. I really don't know what to do about it. Miss Passay—Why don't you get him a stepmother?

Mrs. Snowflake—Can't stay long, Mrs. Kink; I just cum in to see if you would join de mission band. Mrs. Kink—Fo' de law, honey! I doan cum tu me; I can't even play on a mouf organ.

Probably the ice-man has never noticed the dainty little tin tongs that are furnished with boxes of confectionery. They are neat, inexpensive, and would be quite useful in his business.

Washerwoman—Please, mum, I've brought your wash. Patron—Well, take it to some one else and leave me some one else's wash. I think if you will manage that way I'll get more of my things.

"Five o'clock teas are a nuisance," remarked Nuwed, who always found company in his house when he got home from his office. "Five o'clock vexations would be a more appropriate title for them.

Lady—Your references are all right, and if your cooking is really good I'll hire you. Cook—If you have any doubts about me cookin' ask Perlaceman Doolihan, who was on the bate when I lived wid my last family.

Miss Rosebud—Oh, well, you must not blame her; she is one of the period. Bronson—Period? She a girl of the period? She doesn't know what a period is. Why, she never stops talking except with an exclamation point.

A gentleman who imagined he recognized a lady friend advanced cordially and addressed her: "I beg pardon," he said, "but isn't this Miss Greenleaf?" "No, sir," replied the lady; "my name is Redpath." "Ah! excuse me; I must be color-blind."

The March of Civilization.—Interpreter—Chief Wanzo wants no more beads and brass wire; he says you cannot cross his country unless you agree to pay his price. African Explorer—What does he want? Interpreter—Two-thirds of the royalties on your next book.

First Tramp—I don't see why our names don't get into the papers, Bill. Second Tramp—Why should they? First Tramp—Well, I read to-day that a dinner was given to some big gun in New York a day or two ago. We get dinners given to us every day and nothing is said about it. Folks is prejudiced, Bill.

Should George Francis Train beat Nelly Bly in the round-the-world race by ten days, as now seems probable, it will be due partly to what Shenstone calls the propensity of people "to speed the parting guest." Mr. Train has a talent for inciting this propensity to its utmost activity in all he meets. Miss Bly hasn't.

A lawyer gave a dinner party, after which the gentlemen retired to smoke and chat. All at once he got up, took down a sword which formed part of a trophy, and brandishing it in the air, exclaimed: "Ah! gentlemen, I shall never forget the day when I drew this blade for the first time!" "Pray, where did you draw it?" said an inquiring guest. "At a raffle," was the lawyer's rejoinder.

Continued from first page.

extends to their colleagues, whom they may have served a good turn upon some other measure and where now a personal favor is asked in return. But money in legislation is found exerting its potent influence, not only in Congress but in almost every State Legislature of the land, and I beg to call your attention to a few facts bearing upon the same in this State.

Not always and perhaps not often, has there been bribery or positive corruption on the part of members; but the cunning of wealth has been artfully hidden in the phraseology of laws while the unskilled and the unwary have been used as tools.

Corporate franchises and taxes seem to have occupied the attention of moneyed men during the past few years and apparently with great success to themselves. Not long ago corporations except for certain purposes were almost unknown; while now more than one-half of the property of this State, both real and personal, is under corporate control or ownership.

I am not blind to the wonderful achievements of corporate enterprise, nor to the innumerable benefits and advantages these corporations have brought to us through their aggregated capital. But while we recognize all this, let us not forget that at the same time, they have been adding burdens to the weak and making lighter their own.

There are many wholesome reasons why they should be fostered and maintained, under proper restrictions and reservations, but the dangers they threaten are becoming more and more apparent as these soulless bodies are so rapidly receiving their long charters with the immunities and privileges they confer.

In "Constitutional Limitations" by Judge Cooley, we find the following language: "It is under the protection of the decision in the Dartmouth College case, that the most enormous and th eatening powers in our country have been erected, some of the great and wealthy corporations, having greater influence in the country at large and upon the legislation of the country then the States to which they owe their corporate existence.

"Every privilege granted or right confessed, no matter by what means, or on what pretence, being made inviolable by the constitution, the government is frequently found stripped of its authority in very important particulars by unwise or corrupt legislation; and a clause in the federal constitution whose purpose was to preclude the repudiation of debts and just contracts, protects and perpetuates the evil."

The charters of these corporations have been held as contracts with the State and generally are not subject to revocation or change by subsequent Legislatures. These bodies do not die, they defy the distribution of their wealth by death, and virtually revive in effect the old doctrine of primogeniture and entailment of property. They exempt their stockholders from personal liability, except for labor, beyond the amount of their stock. They are the medium through which nearly, if not quite, all of our trusts and combinations are formed; they get their long time charters and snap their fingers at the people whatever may arise, justly calling for a change. They retain the right to dissolve their own obligations by a surrender of charter while they hold the State to a full performance. Many of them set aside large sums of money annually for the purpose of influencing legislation in their interests and charge it up in general expenses. They fill the lobbies of our capital at every session of the Legislature, with their paid servants, and almost always defeat every measure that bids fair to afford relief to the people.

That I might have some definite foundation upon which to base my conclusions, I spent several days in compiling and summarizing some statistics found in the reports of corporations to the Secretary of State, and to which I was kindly given access.

Though they will occupy but a moment of your time and may prove of little interest, they have had the effect to confirm in my own mind some previously entertained convictions.

Other statistics I shall give have all been obtained from official sources.

During the last twenty years our population in Michigan has about doubled. As showing the relative growth of corporations during the same period, I first compiled those formed during the years 1867-8-9 and then those for 1887-8-9.

I found that during the first period, mining corporations were organized with authorized capital to the amount of $13,171,000, and during the latter period to the amount of $159,801,000. During the first period there were chartered mercantile and manufacturing corporations with paid up capital to the amount of $1,985,800, and during the last period to the amount of $48,011,000. And thus in the same ratio with others. While our population has been increasing two fold, corporations have increased from twelve to fifteen fold.

The total assessed valuation of property in this State as last equalized in 1886 was $849,921,063.58. This was divided as follows:

Real estate	$710,632,543 20
Personal property	139 287,518.38

That we may know how the taxes are paid and by whom, let us examine briefly this last item of personal property. By the census of 1884 there was shown to be upon the farms of this State:

Live stock	$70,626,448
Farm implements	21,897,486
Total	$92,523,734

There are in the State 160,000 farmers, and if we shall deduct from the above amount the full statutory exemption of $200 for each of them we will lessen the above amount $32,000,000, leaving $60,523,734 of taxable personal property on the farms. Deducting the $60,523,734 from the total assessable personal property, $139,287,518.38, we have remaining unaccounted for $78,763,734.38. From this amount we may deduct $22,929,159.10 of bank stock which cannot escape taxation. This reduces our assessable personal property to $55,834,575.28. And now as showing the escape of personal property from taxation let us look over the other kinds of personal property which ought to share some of the burdens.

In the first place there are real estate mortgages upon the landed property of the State to the amount of $129,000,000, nearly all of which are subject to taxation in the State. There are actual deposits in the incorporated banks of the State to the amount of $71,269,772.91. There is large capital and deposits in the private banks of the State, not reporting and numbering more than 200; there is the personal estate of all the mercantile and manufacturing corporations with a paid up capital of $159,400,000, all of the notes, chattel mortgages, municipal bonds, unsecured debts, all mercantile stocks of goods, steamboats and shipping, together with all other classes of personal property. Add these together and you will have more than a half billion dollars of personal property subject to taxation and assessed at $55,000,000.

At the 1887 session of the Legislature a law was passed which aimed at the taxation of mortgages and making their ascertainment easier for such purpose. After two years the owners of mortgages finding their secreted property was being reached by taxation, came down to the Legislature and had a bill passed repealing that law so odious to them, and which would have become a law but for the veto of the governor.

These moneyed men based their plea upon the hardship that the law worked upon the farmer and real estate owner, and yet nowhere was the mortgagor of farm or land heard to complain. Within the last few years there has grown up a new system of corporate existence in this country known as "Building and Loan Associations." The object was wholesome and commendable, allowing, as was intended, the homeless to secure homes by making payments at short intervals. The results have been beneficial in many places, but already, if signs are not misleading, the wealthy are using these franchises to satisfy their own inordinate greed.

The inducements everywhere held out to the money loaner are rates of interest and profit varying from 15 to 25 per cent. Their capital stocks range in this State from $50,000 to $50,000,000 and their charters run for 20 years. At the last session of the Legislature a law was enacted exempting all shares, mortgages and other securities held by such associations or any of their members, from all taxation under the laws of the State. They are not liable for extortionate profits or subject to usury laws. Investments in these companies certainly promise good returns to the loaner, and citizens cannot be censured for availing themselves of their advantages. Whether the people of the State shall be content with them as now existing is a question of serious doubt in my own mind.

But this is not all. There are classes of property in the State which are not subject to local taxation, but pay what are termed specific taxes into various State departments. Among these are the railroads, insurance companies, telegraph and telephone, mining companies, freight, transportation and sleeping-car lines, etc.

The value of railway property in this State is officially estimated at $248,417,379. These railroads paid in taxes last year $715,640, or less than one-third of one per cent upon their valuation, while your taxes were more than two and a half per cent, more than eight times as high as those paid by railroads. The average taxation of the whole State was not less than one and a half per cent, while railroads with their vast wealth escaped with about one-fifth of such rate. As illustrating the influence of these great corporations upon legislation, let me cite a single instance: The L. S. & M. S. railroad, the richest, most prosperous and with largest earnings per mile of any company in the State, has long been under a special charter which virtually expired several years since. By that charter it has escaped the payment of more than one-half the taxes required of other railroads in the State and has paid only about one-sixth of one per cent upon its valuation. At each of the last three sessions of the Legislature bills have been introduced to compel this company to pay taxes upon the same basis and according to the same law governing other roads. But without a rational excuse or reason being offered why the bill should not become a law, it has always met defeat in the senate by a failure to secure the necessary number of votes. By this failure the State gets $46,743.60 per year from the L. S. & M. S. railroad, where it ought to receive $94,329.05.

You ask how they accomplish this. I do not know; sufficient it is that $96,000 robbed from the people every two years will pay well the board bills of their effective lobbyists who camp here till their work is done.

The paid-up capital of the great mining companies of this State now in active operation is more than $35,000,000; some of this stock is worth on the market 200 and upwards, and yet all the taxes received by the State last year from all mining companies, active and inactive, was $74,864.50, less than one-fifth of one per cent upon the paid-up capital of the operating mines alone.

The Pullman Palace and Sleeping Car Co., with all their cars running over the roads of this State, at no time in value less than from $100,000 to $300,000 paid into our State treasury last year the enormous sum of $70.10 in taxes. All the refrigerator and freight-car lines, all palace and sleeping-car lines combined, paid only $560 of taxes.

If I have called your attention to a few of these facts to show the extent of moneyed influence on legislation, and it would seem that the glaring inequalities they show are ample reasons why organizations like the Patrons of Industry are springing up under various names demanding that these wrongs be righted.

Though unprepared with any original remedies for the ills pointed out I will briefly allude to some which are being administered in other States and countries, and others suggested but not yet in force.

1. Corruption at the polls and the direct purchase of votes can best be treated by a secret ballot. And well will it be when every vote at all elections shall be cast in such secret that it shall be beyond the power of the man of dollars to know how the one whom he would or could buy has exercised his right of suffrage. Our rural precincts, where corruption of this kind is seldom known, must sacrifice something of their established conservatism in order to preserve this only safeguard to our form of government.

2. The equal chance of rich and poor alike to aspire to the United States Senate will only have been approached when their election shall be by a direct vote of the people.

3. That the nominee of small means may conduct his campaign with the same degree of fairness against the one of wealth, the "English purity of election law" is respectfully suggested for consideration.

That law was enacted in England in 1888, and has been highly commended. Prior to its enactment corruption by the use of money ran riot, and at the last election of members to the House of Commons, prior to its passage, $7,500,000 was expended by candidates to secure their seats, and nearly all in the direct purchase of votes.

By the present law the candidate is limited in the amount he can expend for campaign purposes, regulated by the office sought. All expenditures must be made through some authorized agent, and sworn statements, itemized down to a postage stamp, must be filed in public offices subject to inspection. The law is very comprehensive, and a breach of it forfeits not only the office sought but the right of franchise, and subjects the offender to heavy penalties in other ways.

4. The people should in some manner have better means of information concerning the bills introduced for enactment, and many a vote would be changed did the home constituency know the import of the bill for which it was cast. An upright legislator courts the vigilance of his district.

5. Corporations should never be given franchise for long periods without a reservation of such rights to the people as will permit them to correct any abuses that may arise or make such changes as shall be just.

In some of the States no corporation is chartered until it has paid into the State treasury a license fee based upon a percentage of its authorized capital stock.

The New York law, in force in this State last year, would have turned into our treasury the sum of $150,000 from such fees. The Comptroller of New York estimates that there is more than one billion dollars of corporate indebtedness in the shape of bonds and in other forms owned by citizens of this State and which almost entirely escapes taxation. He recommends that the corporations be made to retain from their annual payments of interest a certain share from each of say one per cent, and pay the same into the State treasury. This would add a large revenue and would reach much secreted property. How this might be held in a constitutional sense I am unable to discuss. It is however, worthy of thought.

6. Another interesting law in force in that State is one passed in 1887, called an "Inheritance Tax." It provides in substance for payment into the State treasury five per cent from all inheritances from the estate of persons dying with or without wills, where those not belonging to the immediate family of the deceased obtain property. During the first year under the operation of this law $461,716 was collected from the tax, and during the next year $736,084.

Its operation is giving such satisfaction that Gov. Hill recommends that it be made to apply to all estates, and to members of the immediate family as well, over and above certain amounts to be first exempt.

Though I have touched upon only a few points of this great question, I find that your time has already been occupied beyond a proper limit.

You might have been better entertained, had I indulged in specifications less and generalities more; but if reform shall come to us, if evils shall be corrected without a revolution, if the sanctity of the ballot shall be restored and maintained, if the burdens of government shall be made to rest upon the shoulders of the strong as well as the weak, if the fingers of soulless corporations shall be kept from reaching greedily into the pockets of posterity by their unending and immutable charters, if good laws shall be enacted and bad ones prevented, they must come by applying different remedies to varying disorders, and no sweep of the hand can ever effect the desired changes.

I fear that we are drifting away from the people and in many particulars are far out in the direction of Rome under the Cæsars.

Popular will has been contaminated with money; corporations and families of them called trusts have commanded men and Legislatures to move in their service as the barons of old marched their retainers into battle.

In our brief history we have confronted many dangers. "Armies," "victories," "conquest," are familiar words of our brief history, but easier won have been all our previous battles than will be the one now on against selfishness, intrenched as it is behind its defiant bulwarks.

The questions to be solved are, first, whether the shoulders of wealth shall bear all the epaulets of honor and distinction, and whether or not as they grow broad and high among their fellow men, they shall bear their proportionate burdens, or shift them upon the poorer classes.

A REPORT to the State Department at Washington from Mayence, Germany, shows the importations of American beef cattle has not been a success. The prejudice against the beef was strong, and it was everywhere declared too fat, too tough, of too dark colored, and generally unsatisfactory.

Summer Tours.

The Michigan Central have issued a very neat book of summer tours to all the principal summer resorts, east and north, giving a description of the routes, rates, etc. Everybody contemplating a trip to one or more of the numerous places mentioned in the book, can procure one free at the Union Ticket Office, 66 Woodward ave.

Be Your Own Horse Doctor.

The Illustrated Catalogue issued by the Pioneer Buggy Co., Columbus, O., contains not only full particulars about their Buggies, Carriages, and Road Carts, but gives much desirable information regarding the horse, how to tell his age, together with a list of all his diseases and what to do to cure them. This valuable book should be in the hands of every farmer and horse owner. Will be sent to any address by sending six cents in stamps to the Pioneer Buggy Co., Columbus, O. See advertisement in other column.

Veterinary Department

Conducted by prof. Robert Jennings, Veterinary Surgeon. Professional advice through the columns of the Michigan Farmer to all regular subscribers Free. The full name and address will be necessary that we may identify them as subscribers. The symptoms should be accurately described to ensure correct treatment. No questions answered professionally by mail unless accompanied by a fee of one dollar. Private address, No. 201 First St. Detroit, Mich.

Obstructed Teat in a Cow—Scratches on a Stallion.

BIRMINGHAM, June 9, 1890.

Veterinary Editor of the Michigan Farmer.

I have a fine Durham cow seven years old, a great milker, which has the right hind teat slightly obstructed. There is no lump discernible, and seems all right everyway, only does not give down as freely as the others. It takes longer to milk it, and then when I am through the teat will fill up in one or two minutes while the rest remain empty. Will a milking tube properly inserted open the duct?

Also, I have a Clyde stallion, three years old, which had the scratches this spring, and there is a place back of the knee on both forelegs, and on front side of hind legs, which fails to heal, and every day or two a new scab will appear somewhere below the knee or gambrel joints; but they heal readily. I have applied several of the common remedies for scratches, also doctored for the blood. The horse is gaining in flesh and looks well What can I do in these two cases?

I would add my testimony in favor of your two great remedies, Bovine Panacea and Colic mixture. No farmer or stockman can afford to be without them.

A SUBSCRIBER.

Answer.—First, the obstruction in your cows teat may be removed by introducing a milking tube, first bathing the teat with hot lard, and oiling the tube well before introducing it into the teat. Regulate the bowels by small doses of sulphate of magnesia, guarded by a little pulverized jamaica ginger root.

Second, give the stallion the following: Socotrine aloes, pulv., two ounces; Jamaica ginger root, pulv., one ounce. Mix and divide into eight powders. Mix in the feed one powder night and morning, or mix with water to a paste and smear on the tongue, using a wooden paddle for the purpose. Wash the sores on the legs with castile soap and water, then apply either of the following once or twice a day, with a clean piece of soft sponge: No. 1—colodion and castor oil, of each two ounces; balsam of fir, one drachm. Mix all together and apply with a clean piece of sponge to the affected parts twice a day. Or take glycerine, five ounces; tannin, one ounce; carbolic acid, one scruple. Mix all together, and apply twice a day. As improvement takes place once a day will suffice.

Commercial.

DETROIT WHOLESALE MARKET.

DETROIT, June 28, 1890.

FLOUR.—Prices have declined on all grades. Market dull. Quotations on car lots are as follows:

Michigan roller process	4 00 @4 25
Michigan patents	4 40 @4 75
Minnesota, bakers	3 90 @4 00
Minnesota, patents	4 70 @4 95
Rye	3 00 @3 10
Low grades	2 50 @2 85

WHEAT.—Lower than a week ago and dull. Good weather is responsible for the weakness. Speculators are scared off. Chicago, New York and St. Louis all showed a slight decline yesterday. Quotations yesterday closed as follows: No. 1 white, 86¼c; No. 2 white, 81¼c; No. 3 white, 76c; No. 2 red, 87½c; No. 3 red, 80c. Closing prices on futures were as follows: No. 2 red, July, 87½; August, 87¼c; September, 87½c; ₩ bu.

CORN.—Quotations are as follows: No. 2, 36¼c; No. 3, 35c; No. 4, 34c; No. 2 yellow, 37¼c.

OATS.—No. 2 white quoted at 33c; No. 2 mixed at 31½c, and light mixed at 32c per bu. Demand active.

BARLEY.—Market dull. Selling at a range of 85c@$1 per cental for fair to choice samples. Receipts the past week, 3,975 bu.; shipments, 636 bu.

RYE.—Quoted at 48¼c per bu. for No. 2.

FEED.—Winter bran quoted at $11@11 25 per ton; middlings, $11@12 per ton.

BUTTER.—Market dull. Fresh dairy, 12c; fair to good, 9@11c; old packed stock, unsalable; creamery quiet; quoted at 12@14c ₩ lb.

CHEESE.—Michigan full creams held at 8@8¼c ₩ lb.

EGGS.—Market easy at 13¼@13c per dozen. Receipts of fresh are ample.

HONEY.—Quoted at 10@13c for comb. Extracted, 7@9c. Market dull.

HAY.—Timothy in car lots, $9 00@11 00.

BEANS.—Quoted at $1 70@1 75 per bu. for city hand-picked stock. Unpicked sell at $1 25@1 50 per bu. These prices are for car lots. From store prices are $1 75@1 80 per bu. Market dull.

SALT.—Michigan, 80c per bbl. in car lots, or 85c in 10-bbl. lots; dairy, $1 80@2 10 per bbl.: Ashton quarter sacks, 72c.

HIDES.—Green city, 4c ₩ lb., country, 4c; cured, No. 1, 5½c; No. 2, 4c; calf, No. 1, 6½c; No. 2, 4½c; veal kip, No. 1, 4½c; runners and No. 2, 2½@3c; sheepskins, 75c@$1 75 as to quantity of wool.

BEESWAX.—Quoted at 30@35c ₩ lb.

POTATOES.—Market quiet; old selling at 35@40c ₩ bu. from store. New Southern, $3 75 per bbl.

DRIED FRUIT.—Apples quoted at 4¾@5¾c for common, and 9@9¼c ₩ lb. for evaporated; peaches, 13@14c.

FOREIGN FRUITS.—Lemons, Messinas, ₩ box, $5 00@5 50; oranges, Messinas, $5 75@6 00; bananas, yellow, ₩ bunch, $1 25@2 25. Figs, 11@12c for layers, 15c for fancy. Cocoanuts, ₩ 100, $4 50@5. Persian dates, new, 6@6¼c ₩ lb. by the box. Pine apples, $1 50@2 75 per doz.

APPLES.—Good to choice new stock, 75c ₩ ½-bu. box. Stock arriving not in good condition.

GOOSEBERRIES.—There was only a fair demand and the light receipts were found to be entirely adequate. Stands sold at $4 50@5.

NUTMEG MELONS.—Quoted at $2 25@2 50 per crate for Osage.

CHERRIES.—Receipts generally in poor condition. Sweet varieties are quoted at $8@8 50 per stand, and sour were nominal at $4 50@5. The demand good.

STRAWBERRIES.—The market was active and firmer as a result of only fair receipts. The sales were at $2 50@4 per bu. the latter figure for Wilsons the only sorts arriving in good condition.

ONIONS.—In foreign Egyptian are offered at $1 40@1 50 per bu. New Southern, $1 40@1 50 ₩ bu.

CABBAGE.—Southern held at $1 50@1 75 for 1-bbl. crate, and firm.

POULTRY.—Live: Fowls and chicks, 7@8c ₩ lb.; ducks, 7@8c; turkeys, 10@11c; pigeons, 30c per pair. Spring chickens, 15c per lb. Receipts large and market dull.

RASPBERRIES.—The receipts were only moderate and entirely of black fruit, which was held at $4 25@4 50 per bu. case. The demand is improving.

TOMATOES.—The market was active and only fairly supplied. Crates of 4 basket sold at 2 50 and boxes of ½d bu at $1@1 30.

VEGETABLES.—Lettuce, 25@30c ₩ bu.; spinach, 25@30c; radish, Canada, 18@20c; onions, 25@35c; pie-plant, 25@30c; vegetable oysters, 40c; asparagus, 35@40c ₩ dozen bunches; parsley, 20c; cucumbers, 50c per doz.; wax beans, 75c per ½ bu. box; string beans, $1 25@1 40 per bu. box; peas, $1@1 10 per bu.; squash, summer variety, 75c per doz.; beets, 30c ₩ doz.; cauliflower, $1 25@1 50 ₩ doz. Celery, 30@35c per doz. bunches.

DRESSED VEAL.—Unchanged; quoted at 3@6c per lb. as to quality.

PROVISIONS.—Market entirely unchanged. Quotations are as follows:

Mess, new	12 00@12 25
Family	12 00@12 25
Short clear	12 25@12 50
Lard in tierces, ₩ lb	5¾@ 6
Lard in kegs, ₩ lb	6 @ 6¼
Pure lard, in tierces	6¼@ 6¾
Hams, ₩ lb	10 @ 10¾
Shoulders, ₩ lb	6¼@ 6¾
Choice bacon, ₩ lb	8 @ 8¾
Extra mess beef, new ₩ bbl	6 75 @ 7 25
Plate beef	8 00 @ 8 25
Dried beef hams	8 75 @ 9 00
Tallow, ₩ lb	

HAY.—The following is a record of the sales at the Michigan Avenue scales for the week up to Friday noon, with price per ton:

Monday.—17 loads: Seven at $13; five at $12; two at $14 and $11; one at $13 50.

Tuesday.—19 loads: Eight at $12; four at $13; two at $11 and $10; one at $14, $13 50 and $12 50.

Wednesday.—28 loads: Fifteen at $12; four at $13; two at $11 and $10; one at $12 50, $10 50, $9 50 and $8 50.

Thursday.—13 loads: Three at $11; two at $14, $13 and $12; one at $10 50.

Friday.—10 loads: Three at $11; two at $14, $13 and $12; one at $10 50.

LIVE STOCK MARKETS.

King's Yards.

CATTLE.

The receipts of cattle at these yards for the past week numbered 629 head. The offerings were of poor average quality, and common cattle sold 10@15 cents lower than those of last week. Good grades were scarce and sold fully as high as they did one week ago. Fair mixed butchers stock was also in good demand and sold at former prices. The run of calves was quite heavy and sold a shade higher than last week.

Haley sold Billkofski 4 fair butchers steers av 972 lbs at $3 40 and a mixed lot of 11 head of coarse butchers stock to Grant av 658 lbs at $2 25.

Switzer & Ackley sold Reagan a mixed lot of 4 head of thin butchers stock av 842 lbs at $2 50 and 7 coarse ones av 730 lbs at $2.

Pearson sold Reagan a mixed lot of 11 head of coarse butchers stock av 716 lbs at $2 25 and 7 stockers to Burt Spencer av 537 lbs at the same price.

McHugh sold Hersch 8 good heifers av 890 lbs at $3 75.

Bohm sold Fleischman a mixed lot of 5 head of thin butchers stock av 882 lbs at $2 40 and 7 stockers to Burt Spencer av 537 lbs at $2 75.

Wells sold Murphy 4 stockers av 662 lbs at $2 85 and 5 fair cows to Loosemore av 1,196 lbs at $2 80.

Reason sold Loosemore a mixed lot of 10 head of fair butchers stock av 895 lbs at $2 75.

Switzer & Ackley sold Brooks 6 stockers av 640 lbs at $2 20.

C Roe sold Fleschman a mixed lot of 9 head of thin butchers stock av 670 lbs at $2 40 and 2 bulls av 655 lbs at $1 75.

Lomason sold Loosemore 3 fair cows av 983 lbs at $2 75 and 2 coarse ones av 895 lbs at $2.

Wells sold Stonehouse a mixed lot of 11 head of good butchers stock av 825 lbs at $3 05.

Hadden sold Sullivan 8 stockers av 760 lbs at $2 85.

Robb sold Sullivan 6 stockers av 798 lbs at $2 90.

Snook sold Sullivan 7 stockers av 630 lbs at $2 65.

C Roe sold McGee a mixed lot of 10 head of thin butchers stock av 665 lbs at $2 50.

Howlet sold J Wreford 3 fair butchers steers av 966 lbs at $3 40.

McHugh sold Loosemore a mixed lot of 17 head of fair butchers stock av 962 lbs at $3.

Reason sold McGee a mixed lot of 13 head of coarse butchers stock av 670 lbs at $2 25.

Snook sold Monahan a mixed lot of 14 head of thin butchers stock av 626 lbs at $2 50.

Holmes sold Stonehouse 5 fair butchers steers av 944 lbs at $3 25, 2 thin heifers av 606 lbs at $2 50 and 3 bulls to Sullivan av 936 lbs at $1 90.

Haley sold Sullivan 10 feeders av 917 lbs at $3.

Webster sold McGee a mixed lot of 29 head of fair butchers stock av 800 lbs at $2 75.

Adams sold Brooks 4 stockers av 527 lbs at $2 25.

McHugh sold J Wreford 3 fair heifers av 823 lbs at $3 50.

Botsford sold Marx a mixed lot of 14 head of fair butchers stock av 800 lbs at $2 70; 4 thin cows av 985 lbs at $2 25 and 4 feeders to Sullivan av 910 lbs at $2 80.

Hoover sold Marx a mixed lot of 7 head of coarse butchers stock av 580 lbs at $2.

Astley sold Loosemore a mixed lot of 8 head of fair butchers stock av 810 lbs at $2 80 and 3 coarse ones av 486 lbs at $2.

C Roe sold Fleschman a mixed lot of 6 head of fair butchers stock av 746 lbs at $2 80 and a bull weighing 850 lbs at $2.

Baker sold McGee a mixed lot of 19 head of thin butchers stock av 750 lbs at $2 40 and 4 coarse ones av 507 lbs at $2.

C Roe sold Sullivan a mixed lot of 17 head of fair butchers stock av 768 lbs at $2 80.

McHugh sold Bussell a mixed lot of 10 head of good butchers stock av 776 lbs at $3 10; 13 feeders to Sullivan av 974 lbs at $3 15 and 5 av 896 lbs at $3 10.

Holmes sold Stucker 5 coarse cows av 898 lbs at $1 85.

Gunn sold Fleschman a mixed lot of 9 head of thin butchers stock av 825 lbs at $2 50 and 5 coarse cows av 1,066 lbs at $2.

Robb sold Knoch 4 good butchers steers av 962 lbs at $3 60.

Sprague sold Sullivan a mixed lot of 25 head of fair butchers stock av 729 lbs at $2 75 and 2 bulls av 1,025 lbs at $2 25.

Haley sold Stonehouse a mixed lot 10 head of fair butchers stock av 721 lbs at $2 75.

Longcor sold McIntire a mixed lot 12 head of fair butchers stock av 666 lbs at $2 75.

McHugh sold Bussell a mixed lot of 8 head of thin butchers stock av 736 lbs at $2 40.

SHEEP.

The offerings of sheep numbered 450 head. The demand for sheep was considerably in excess of the supply and prices ranged higher than those of last week.

Hogan sold Fitzpatrick 100 av 70 lbs at $4.

Bolun sold Fitzpatrick 31 av 66 lbs at $3 50.

Windiate sold Monahan 30 av 61 lbs at $3 50.

Haley sold Fitzpatrick 33 spring lambs av 53 lbs at $6.

Holmes sold Fitzpatrick 39, part lambs, av 74 lbs at $4 50 and 39 spring lambs av 54 lbs at $6.

Baldwin sold Loosemore 84 av 71 lbs at $3 40.

Lomason sold Monahan 36, part lambs, av 55 lbs at $3 75.

Clark sold Loosemore 41 av 87 lbs at $4 37½.

HOGS.

The offerings of hogs numbered 451 head. The demand for hogs was slow, and prices averaged 10@15 cents lower than those of one week ago.

Howlet sold R S Webb 15 av 212 lbs at $3 60.

Glenn sold Gordon 19 av 218 lbs at $3 65.

Parks sold R S Webb 13 av 156 lbs at $3 60.

Robb sold R S Webb 9 av 218 lbs at $3 55.

Kahlburn sold R S Webb 36 av 199 lbs at $3 60.

C Roe sold R S Webb 9 av 217 lbs at $3 65.

Glenn sold Horwood 23 av 171 lbs at $3 65.

Watson sold R S Webb 49 av 156 lbs at $3 60.

Switzer & Ackley sold R S Webb 17 av 203 lbs at $3 60.

Baker sold Gordon 9 av 155 lbs at $3 60.

At the Michigan Central Yards.

CATTLE.

The market opened up at these yards with a light supply of cattle. There was a fair demand for the receipts, but common cattle were 10@15 cents lower than those of last week. There was a demand for some good cattle and several loads could have been disposed of at fair prices. The following were the closing

QUOTATIONS:

Fancy steers weighing 1,500 to 1,650 lbs	4 50@4 75
Extra graded steers, weighing 1,300 to 1,450	$3 75@4 25
Choice steers, fine, fat and well formed, 1,100 to 1,300 lbs	3 75@4 25
Good steers, well fatted, weighing 950 to 1,100	3 60@4 00
Good mixed butchers' stock—Fat cows, heifers and light steers	3 00@3 50
Coarse mixed butchers' stock—Light thin cows, heifers, stags and bulls	2 00@2 50
Stockers	2 25@3 00
Bulls	1 75@2 80
Veal calves	3 50@4 50

McQuillan sold Burt Spencer 3 fair butchers steers av 1,033 lbs at $3 50 and 4 bulls av 535 lbs at $1 80.

Stevens sold Burt Spencer 4 feeders av 877 lbs at $3.

Haywood sold Sullivan 2 fair butchers steers av 800 lbs at $3 40 and 2 feeders av 860 lbs at $3.

Spicer sold John Robinson 4 thin cows av 1,050 lbs at $3 30 and a mixed lot of 5 head of thin butchers stock to H Roe av 654 lbs at $2 40.

Haywood sold Marx a mixed lot of 5 head of thin butchers stock av 884 lbs at $2 50 and 3 stockers to Brooks av 510 lbs at $2 15.

McQuillan sold Burt Spencer 6 stockers av 731 lbs at $2 85 and 2 bulls av 1,045 lbs at $2.

Estep sold Sullivan a mixed lot of 20 head of fair butchers stock av 936 lbs at $2 90 and a bull to The Michigan Beef Co weighing 1,150 lbs at $2.

Bordine sold Sullivan 5 good butchers steers av 1,138 lbs at $3 60 and 2 bulls to The Michigan Beef Co av 890 lbs at $3.

SHEEP.

The run of sheep in Detroit this week has been very light, and if it continues the local trade will have to look to the west for a supply. The quality of the receipts is inferior and the prices paid for them are certainly high for this season of the year.

C Roe sold John Robinson 114 av 80 lbs at $4 25 and 13 bucks av 93 lbs at $2 50.

Bullen sold Monahan 93 av 70 lbs at $3; 31 culls to John Robinson av 67 lbs at $2 50 and 16 spring lambs av 42 lbs at $5 50.

Bordine sold Fitzpatrick 32 spring lambs av 63 lbs at $6.

Spicer sold Fitzpatrick 23 culls av 86 lbs at $3 35.

HOGS.

There were only three small bunches of hogs on sale. These were disposed of at prices 10@15 cents below the rates ruling last week.

Ellis sold Steele 13 av 153 lbs at $3 60.

Stevenson sold Steele 27 av 168 lbs at $3 60.

Haywood sold Steele 12 av 193 lbs at $3 50.

Chicago.

CATTLE.—Receipts 61,070, against 64,530 last week. Shipments 18,629. The receipts of cattle on Monday numbered 12,122 head. The run of cattle was much lighter than expected and with a good demand prices advanced 10 cents over those of Saturday. The quality of the offerings was only fair. The top of the market was $4 95, but anything prime would have sold at $5 10 or $5 15. Some 1,200 lb Nebraska steers sold at $4 55, and some 980 lb steers as high as $4 20. Most of the natives sold at $4 10@4 50. A good many 1,200@1,460 lb corn-fed western cattle sold at $3 90@4 15. Texas cattle sold at $1 85@2 20 for yearlings and cows, and $2 40@3 35 for steers. Native cows sold prime pally at $2 40@2 80. Stock cattle sold at $2 15@4. Prices were steady on Tuesday with light receipts. The market was a shade lower on Wednesday, and on Thursday was dull, closing weak. On Friday the market was dull and weak, closing at the following

QUOTATIONS:

Extra beeves	$4 90@5 15
Choice to fancy, 1,400@1,600 lbs	4 45@4 90
Good butchers	3 90@4 40
Fancy cows and heifers	3 20@3 60
Poor to choice cows, 850@1,000 lbs	1 90@3 10
Poor to choice bulls, 900@1,200 lbs	2 35@3 85
Stockers and feeders	2 40@4 00
Texas steers	2 10@3 90

HOGS.—Receipts 131,010, against 136,687 last week. Shipments 24,576. The receipts of hogs on Monday numbered 35,428. With the fresh arrivals and those left over on Saturday there were nearly 40,000 hogs on sale. The market opened weak and prices declined 10@15 cents below those of Saturday. Light sold at $3 60@3 87½; mixed $3 65@3 80; heavy packing and shipping, $3 65@3 85. Prices were a shade higher on Tuesday, but were weak and a shade lower on Wednesday. The market was slow on Thursday and closed a trifle lower. On Friday the demand was a little slow and the market closed with light selling at $3 55@3 80, heavy packing and shipping $3 60@3 75.

Buffalo.

CATTLE.—Receipts 17,983, against 17,722 the previous week. There were 240 car loads of cattle on sale Monday. The market was the dullest of the season and prices were 15@20 cents lower on nearly all grades than at the close last week. The best steers on sale of 1,300 to 1,400 lb brought $4 50@4 60 and good handy butchers steers and medium weights, $4@4 30. Common to good mixed butchers stock sold at $2@3 90 and stockers at $2 25@3 25. Prices were 5 cents lower on Tuesday, and for the balance of the week the market was strong, with small receipts, closing on Friday at the following

QUOTATION

Extra Beeves—Graded steers, weighing 1,500 to 1,600 lbs	$4 60@4 90
Choice Beeves—Fine, fat, well-formed steers, weighing 1,400 to 1,500 lbs	4 50@4 60
Good Beeves—Well-fattened steers weighing 1,300 to 1,400	4 40@4 50
Medium Grades—Steers in fine flesh, weighing 1,100 to 1,300	4 10@4 30
Light Butchers'—Steers averaging 1,000 to 1,100 lbs., of fair to good quality	3 90@4 20
Butchers' Stock—Inferior to common steers and heifers, for city slaughter, weighing 900 to 1,000 lbs	2 50@3 25
Michigan stock cattle, common to choice	2 25@3 40
Michigan feeders, fair to choice	3 40@3 65
Fat bulls fair to extra	2 25@3 25

SHEEP.—Receipts 23,600, against 27,000 the previous week. There were only 26 car loads of sheep on sale Monday. The market, owing to the light supply was active and strong, and for the best grades prices were higher. Common to fair stock was no better however, and sales ranged good to choice sheep, $5 25@5 40; common to fair, $4 50@5. Lambs were in light supply and steady at $6@6 75 for common to choice lots. Few extra fine, $7 per hundred. Prices were strong on Tuesday, ruled steady on Wednesday and Thursday, and closed on Friday with choice to extra sheep selling at $5 30@5 50; good to choice, $5 25@5 20; spring lambs, choice to extra, $6 95@7 10; good to choice, $6 65@6 90.

HOGS.—Receipts 55,435, against 48,895 the previous week. There were 110 car loads of hogs on sale Monday. The market opened up slow and before the close prices were 10@15 cents per hundred lower than on Saturday and closed weak. Yorkers, good to choice, sold at $3 90@3 95; good medium weights, $3 90@4; heavy weights, $3 90@3 95; pigs, $3 70@3 80. For light grades prices were a shade lower on Tuesday, ruled steady on Wednesday and Thursday, and closed on Friday with Yorkers selling at $3 80@3 85, and mixed, heavy and medium weights at $3 85@3 90.

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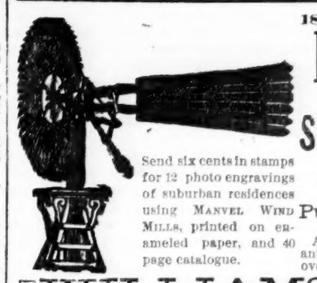

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